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ABSTRACT

This report describes an evaluation of Project Information Packages (PIPs), sets of manuals and other materials intended to help a school district adopt and implement an exemplary education project. Four PIPs were evaluated in a field test, each PIP describing a different bilingual project. It was concluded that the awareness materials produced few applications for PIPs. Field-test sites that received PIPs tended not to follow PIP guidelines closely, but to adapt them extensively, often with good justification. The bilingual programs at the sites were collectively successful, but the dissemination effort could not be judged a success. The present volume documents the methodology and results of the process and impact substudies and provides detailed discussions of conclusions and recommendations. Five appendices are attached: (1) site-by-site results of the process substudy, (2) site-by-site results of the impact substudy, (3) the complete conceptual framework used in the process evaluation substudy, (4) a comparative analysis of the contents of the four bilingual PIPs, and (5) a summary of the major mid-study inputs from the study advisory panel. (Author)

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AN EVALUATION OF PROJECT INFORMATION PACKAGES (PIPs)
AS USED FOR THE DIFFUSION OF BILINGUAL PROJECTS

VOLUME II

TECHNICAL DISCUSSION AND APPENDICES

U. S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
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PREFACE

This report describes an evaluation of Project Information Packages (PIPs), a specific type of packaging, as field tested by the United States Office of Education (USOE) for the diffusion of four bilingual projects. The field test began with the dissemination of the PIPs in the fall of 1976. The evaluation described here began about nine months later (summer, 1977) and continued through the 1978-1979 school year.

This report consists of three volumes, as follows:

Volume I, the Summary Report, comprises (a) an executive summary of the study questions and findings, (b) an introduction to the study (Section 1), (c) a non-technical summary of Substudy I, the process evaluation of the PIP diffusion effort (Section 2), and (d) a non-technical summary of Substudy II, the evaluation of the impact of the diffusion effort on students (Section 3). This volume is intended to provide a self-contained overview of the policy-related study questions and conclusions.

Volume II, the present volume, documents the methodology and results of the two substudies and provides more detailed discussions of conclusions and recommendations. This volume also includes five appendices: (a) site-by-site results of the process substudy, (b) site-by-site results of the impact substudy, (c) the complete conceptual framework used in the process evaluation substudy, (d) a comparative analysis of the contents of the four bilingual PIPs, and (e) a summary of the major, mid-study inputs from the study advisory panel.

It is assumed that the reader will read Volume I as an introduction to Volume II. Volume II is not intended to stand alone, and the sections of the report are numbered consecutively across the two volumes, with Sections 1-3 included in Volume I and Sections 4-13, plus Appendices A-E, included in Volume II.

Volume III, is a collection of specific evaluation guidelines and job aides that were developed for the use of the field-test sites and which have been organized in the format of a Prototype Evaluation Manual. This volume should be viewed as a preliminary draft rather than a finished product. Further, it deals in detail only with the evaluation of student achievement, which is only one component of a complete, bilingual program evaluation.

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SUBSTUDY I: DIFFUSION OF THE PROJECTS

4. INTRODUCTION TO SUBSTUDY I: DIFFUSION OF THE PROJECTS

The summary of Substudy I (Section 2, Volume I) describes the general focus of the substudy. This section elaborates on the USOE study objectives and the specific working questions.

4.1 USOE Study Objectives

The request for proposal (RFP) for the bilingual PIP study listed four objectives:

1. Determine the effectiveness of the packaged materials in assisting school districts to select and implement the projects they describe.
2. Determine the effectiveness of projects implemented via the PIPs in improving student achievement and attitude.
3. Identify and analyze implementation problems encountered by the tryout sites.
4. Revise the materials on the basis of user input and the problems identified.

4.1.1 Process Evaluation Requirements

In the RFP, Objectives 1 and 3 defined the process (Substudy I) evaluation issues. The specific issues, as stated in the RFP were:

4.1.1.1 Selection and adoption of projects. For selection and adoption of projects, the RFP defined the process issues as:

- How sites were made aware of the bilingual PIPs (e.g., what information and assistance was provided to adopters by USOE and the TRCs).

- How effective the awareness and planning materials were for assisting school districts in determining whether or not to adopt a PIP project (i.e., were the materials used, did they contain sufficient information for school districts to make an adoption decision, what additional assistance/information was needed).
- Why sites selected a PIP project for implementation.
- Whether adoption sites were suitable to implement the projects (i.e., were the projects selected suitable to the needs and contexts of the districts?).
- What the extent of district support was for the projects at this stage and how support was generated.

4.1.1.2 Start-up and operation of projects. For start-up and operation phases, the RFP required the contractor to:

- Describe activities and procedures and compare with PIP specifications.
- Determine implementation problems with and participant reactions to activities and procedures described in the PIPs.
- Determine the modifications to the PIP activities and procedures, and the effects that they have.
- Determine the reasons for problems and modifications. Consider whether:
 - the PIP materials are inadequate in some way, or
 - the assumptions in the PIP about the site are not warranted.

4.1.2 Impact Evaluation Requirements

Objective 2 specified a summative (impact on students) evaluation (see Substudy II, Sections 9-13).

4.1.3 PIP Dissemination Recommendations

Under Objective 4, the RFP required that the contractor generate recommendations concerning how, if at all, the projects should be disseminated in the future including:

- a. What revisions, if any, are needed in the materials, and
- b. The extent to which technical assistance, in addition to the PIPs, is needed.

The process evaluation and dissemination recommendations are the major focus of Sections 4 through 8 of this report. Sections 9 through 13 describe impact-evaluation activities and results.

4.2 Specific Working Questions

The initial step in planning Substudy I was to reorganize the set of diffusion substudy questions so as to reflect the experience of previous dissemination research.

The general Substudy I question was - What were the effects of the diffusion effort on LEAs? Specifically:

1. Adoption

- a. What influenced potential adopter sites to adopt or not adopt?
- b. To what extent were the projects chosen by adopters appropriate to those adopters?

2. Implementation

- a. What factors (context, PIP, and other) influenced implementation?
- b. What were the characteristics of the resulting programs, and how closely did they resemble those described in the PIPs?

Questions concerning the effects of the diffusion effort on the LEAs are broken down into those relating to "adoption," and those relating to "implementation." Under the heading of "adoption" are included (a) all the awareness activities involved in getting information about the projects and packages to the school districts, (b) district review of the projects, and finally (c) the district decision to implement a particular project. Implementation refers to the actual start-up and operation of the adopted project. For both adoption and implementation stages, separate subquestions address the factors that influenced the final results of these stages and the description of exactly what the results of these stages were.

While the purpose of the study was to observe the effects of the PIP diffusion effort as opposed to diffusion efforts in general, it was recognized that this effort was only one of many influences affecting adopter-site programs. In some districts, private, state, and local regulations and diffusion systems may have had more impact than did the PIP effort. Therefore, in so far as it was possible, the study attempted to account for other major impacts on the adopter-sites, and to attribute project characteristics to the PIPs only where actually warranted. Information on complementary or competing diffusion activities was, of course, also relevant to revision of the PIP diffusion effort.

5. SUBSTUDY I: TECHNICAL APPROACH

5.1 Introduction

The process evaluation for the Bilingual PIP study reflects the philosophy that development of an effective educational diffusion system, or any similarly complex system, is always an evolutionary process of planning, tryout, and revision, with the sequence repeated until satisfactory results are achieved. While a process of minor adjustments based on continuing feedback may later become a permanent feature of a system, the evaluation approach described here is designed for the initial development stages during which many new ideas are tried and major revisions are required.

The conceptual framework that constitutes the basis of the approach is intended not only to document the activities of the bilingual-PIP field test, but also to integrate the diverse collection of positive and negative tryout findings and serve as a basis for revising the diffusion system. The framework derives from systems analysis principles employed by the senior author in the early 1960s (see, for example, Gagnel, 1962). The development of the approach and the framework in their present forms was begun by RMC in the earlier PIP field tests (Studies 2 and 6).

In the simplest terms, the evaluation approach consists of (a) describing the diffusion system as it was intended to operate, (b) describing the system as it actually operated, (c) comparing the two descriptions and analyzing discrepancies, and (d) proposing changes to correct the problems. Recommended changes might take the form of more practicable procedures for meeting the existing goals, but recommendations may also include changes as in the goals themselves.

In principle, this approach is little more than common sense. In practice, however, the many people and organizations involved in a diffusion system, and the wide variety of goals, procedures, materials and so on that are involved, make it difficult to describe such a system in a way

that captures the roles of all the parts of the system and displays their interactions clearly. Comparing the actual findings of a tryout with the original plans for the system and then developing revised plans that retain the successful diffusion techniques and replace the unsuccessful ones is a complex technical task.

The key to the evaluation approach described here is the development of concise, accurate descriptions of intended and actual diffusion systems. These descriptions are referred to here as "models," that is, abstractions of reality that retain only those features that are relevant to understanding and revising the diffusion system. Such models must be, at a minimum, (a) comprehensive in terms of important system features, (b) unambiguous enough so that there is no question as to where any feature fits into a model, (c) minimally redundant so that a given feature need not be described more than once, and (d) internally consistent so that a single set of descriptive conventions applies uniformly throughout the description. Models should also be as parsimonious as possible to maximize their utility.

5.2 Conceptual Framework for Intended and Actual Diffusion System Models

5.2.1 Rationale and Definitions

5.2.1.1 System components. A complete diffusion system is made up of many parts (people, materials, guidelines, and so on) interacting with each other. We will refer to these parts as "components" of a system. The kind of system in which we are interested is a purposive system. That is, it is developed by a particular group (in this case, USOE) to achieve a particular purpose (implementation of effective bilingual projects). This kind of system can be viewed as a sort of pyramid with the organizing agency at the top. The organizers prepare a group of disseminators by selecting, hiring, and training personnel, and by providing them with appropriate materials. The disseminators, in turn, inform LEAs, and provide materials and training. Finally, the LEA personnel obtain and train staff, develop plans and eventually teach students. The goals of the system, of course, are related to what happens to students. However, the USOE impact on the system is, by and large, remote from the classroom.

5.2.1.2 System process statements. If a model is to be useful for improving such a system, it must make clear what the organizers of the system can actually do to achieve their goals. The approach taken here is to describe the contributions of each component to the system, starting with the organizing agency, and to show how, singly or in combination, various components ensure that other components accomplish their purposes. The basic elements from which we build up the system description are "process statements" of the form:

- Which components?
- Do what? (When?)
- To which other component?
- With what results?

plus outcome statements that indicate:

- With what results?

5.2.1.3 System models. In principle, a system model is developed by (a) listing all the components in a system, (b) describing what the components are like before the system begins operation, (c) describing all the processes operating on each component, and (d) describing the results of the processes in terms of what the components are like after the processes have operated. For example, (a) disseminators are listed as components of the system; (b) the characteristics of potential disseminators are described; (c) the processes by which USOE personnel select disseminators from the pool of potential disseminators and train them in system procedures is described; and (d) the results are described in terms of appropriately trained and functioning disseminators.

In practice, a model requires much more detail than the above example suggests, and with the added detail comes a need for careful, systematic organization of all the descriptive statements. In addition, the need for parsimony and internal consistency means that the statements must conform to formally specified conventions. The conventions used in this study for writing and organizing process and outcome statements are summarized in Figure 6 and described in the following sections. The "intended" diffusion system model used in this study appears in Appendix E of this report.

5.2.2 Descriptive Conventions for Components, Processes, and Outcomes

5.2.2.1 Categories of system components. By "components" we mean all the tangible things involved in the diffusion of projects. Components include:

- Persons (including students)
- Other resources (materials, facilities, funds)
- Plans and constraints

These components are probably self-explanatory except for "plans and constraints." We have found that it is helpful to think of plans and constraints as tangible system components that act upon other components and, in turn, are acted upon. "Plans" includes all system guidelines such as

System ComponentsInitial Conditions
and OutcomesProcesses Acting Upon
Components to Produce
Outcomes

<u>Who?</u> <u>To Whom?</u>	<u>With what characteristics?</u> <u>What characteristics result?</u>	<u>Does what?</u>
<u>Personnel</u> USOE OBE OPBE SEA Diffusers Target LEA Decision Makers Project Director Project Staff Others	Goals/attitudes Skills/knowledge Roles/image Availability	Select Train/Inform Elicit Allocate
<u>Other Resources</u> Materials/Equipment Facilities Funds	Content Appearance Roles/image Availability	Select Develop/modify Allocate
<u>Plans and Constraints</u>	Content Roles/image Availability	Select Develop/modify
<u>Students</u>	Goals/additudes Skills/knowledge Aptitude Roles/image Availability	Select Train/Inform Elicit Allocate

Figure 6. Descriptive conventions for diffusion-system models.

those in the PIPs, disseminator's operating plans, and so on. Constraints include all other relevant laws and guidelines, from federal laws to unwritten local policies.

5.2.2.2 Categories of initial conditions and outcomes. There are many ways we could describe the components of a system, but the following categories have evolved as particularly convenient for organizing the descriptions of educational diffusion-system components:

- Personnel and students
 - Goals/attitudes
 - Skills/knowledge
 - Aptitude (students)
 - Roles/image
 - Availability
- Other resources (materials, facilities, funds, etc.)
 - Content
 - Appearance
 - Roles/image
 - Availability
- Plans and constraints
 - Content
 - Roles/image
 - Availability

These categories are interpreted broadly, so as to include virtually all of the characteristics that have been identified to date by RMC as important to the diffusion process. "Goals and attitudes" may apply to persons or groups of persons and are important to the success of any diffusion system. Goals and attitudes are particularly important to include in models of bilingual projects, where goals differ widely and attitudes are often highly emotional. The "skills and knowledge" category includes almost anything a person can learn except for attitudes. The "roles and

image" category includes those characteristics of persons (as perceived by others) such as authority, credibility, and so on. In addition, the organization of a group may be critical to the diffusion of effective projects, and the organizational structure plus the individual roles within the organization are included under this category. Finally, the "availability" of personnel includes both the number of personnel, and the amount of time that each is involved in specified activities.

The most complex "other resources" in project diffusion systems are usually materials such as manuals, texts, awareness brochures, and so on. These are described primarily in terms of their content and their physical appearance, but their roles in the system and their image in the eyes of the users is also important. Availability here includes all considerations bearing on whether the intended users can and do get access to the materials.

For other resources such as facilities and funds, there may be little or no description in terms of "content." "Appearance" applies to facilities but not to funds. "Roles", and "availability" apply to all resources.

"Plans and constraints", like materials, have content. Plans and constraints (e.g., laws and guidelines) have no physical properties, and therefore no category is included for appearance. If guidelines are written down (as in a PIP), then the pages or manuals are considered "materials," and the guidelines are the contents of the materials. The complexity and wording of rules or regulations is important, and is described under "content". "Roles and image" apply to laws and guidelines as they do to all system components. "Availability" is a somewhat more complex category for plans and constraints than for other system components because it includes a variety of features such as whether the laws or guidelines are explicit or implicit, formal or informal, known or unknown, enforced or unenforced.

5.2.2.3 Categories of processes. By "processes" we mean all the system activities intended to obtain or change the people and other components of a diffusion system in order to arrive at the ultimate system goal

that is, adopter-site projects that are serving the students well. Each process is described in terms of four elements. In conventional terms these are "Who does what to whom, and when?" That is, a description of a process includes (a) the active component (or combination of components), (b) the action itself, from one of the categories of processes listed below, (c) the person or other component acted upon, and (d) any time period or sequence considerations important to the process.

As was the case with components, processes have been divided into categories that help to organize the description of a system. These four categories represent the different kinds of things that can be done in order to develop a diffusion system in which personnel, materials, and other components are in place and doing their respective jobs. The categories are:

- Select
- Modify/develop (train/inform)
- Elicit (applies only to persons)
- Allocate

It is intended that all processes in a diffusion system should fit into one of these categories, which are described briefly below.

Select. The first two categories cover the different ways of insuring that personnel, materials and other components are appropriate to their jobs. The first category, "select," includes all activities involved in obtaining components that already exist with the desired characteristics. Thus, personnel with appropriate skills, knowledge, attitudes, roles, and so on might be identified, recruited, and hired. Materials could be identified and purchased, suitable project guidelines could be obtained from other projects. All such activities would be included under the general heading of "selection".

Modify/develop. Where suitable system components, either people, materials, or plans, are not available "off the shelf," it may be necessary to "modify" existing ones or "develop" new ones from scratch.

Persons can be modified by informing or training them. Their roles can be changed by assigning them to new positions. Materials and guidelines can be modified, or new ones can be developed. In short, if the required persons, materials, and other components are not available through selection processes, the system must provide for the necessary training and development.

Elicit. A special category is required to cover processes intended to ensure that personnel who already have the required skills actually perform as intended. The category is labeled "elicit," and includes processes that motivate or constrain persons but do not provide any new skills or knowledge. Awarding bonuses, assigning penalties, and providing pleasant working conditions would all be included. The effect is to change attitudes (which may also be changed by informing or training) without changing skills or knowledge.

Allocate. The final category of processes is labeled "allocate." This category refers to the processes of physically moving components to wherever they are needed. In the case of laws and guidelines, dissemination and enforcement would be included.

5.2.3 Conventions for Organizing Components, Processes, and Outcomes into a Model

5.2.3.1 Assigning process statements to components. In developing a model of a particular diffusion system, components (people, other resources, and plans and constraints) are represented by rows (Figure 7). Thus, for example, there is a row for the project director process and outcome statements. However, there is a basic convention that must be established before beginning to fill in the project director's row. In particular, a process statement is of the form, "Who does what to whom?" The "who" and the "whom" are both components of the system, so each has its individual row. Logically, a process statement could be listed in either row.

GROUPS	INITIAL CONDI- TIONS	STAGES											
		PREPARATION			SELECTION/ ADOPTION			START-UP			OPERATION		
		Processes		Out- comes	Processes		Out- comes	Processes		Out- comes	Processes		Out- comes
Action	Time	Action	Time		Action	Time		Action	Time				
USOE													
Diffusers													
Target LEAs													

Figure 7. Framework for the "intended" PIP-diffusion system model.

It turns out that both ways of grouping process statements are useful. Grouping by "who" (the subject of the process statements) provides a job description for each component, that is, a list of all the processes each component is expected to complete. Grouping by "to whom" (the objects of the process statements) provides a list of all the processes acting upon a component. Grouping by subject provides the most intuitive arrangement (i.e., job descriptions), and this grouping is done as a final step in the analysis of the systems in order to prepare an easily understood system description. However, for the purposes of the analysis and revision of the system, the statements must be grouped by objects (i.e., to whom), in order to see why a component is not functioning in the system as intended. Thus, for example, a statement of the general form--"TRC trains PD." is listed in the Project Director row, not the TRC row.

The rationale is that the models are used for an "outcomes-oriented" approach to analysis. Analyses focus on the final outcomes that a system is intended to produce (i.e., operational, educational programs with specific features achieving specific goals and objectives) and on the intermediate outcomes that lead to the final outcomes. Outcomes are stated in terms of component characteristics (e.g., student skills, project-director skills), and if some outcomes are missing, the first step in figuring out why is to review all processes intended to produce those outcomes. To facilitate this review, all the directly relevant processes should be grouped together. Therefore, the basic arrangement of the process statements is to group them by the "to whom" or objects of the process statements. (The USOE rows, for example, reflect all processes affecting USOE, not all processes in which USOE is involved.) Although this organization initially strikes most researchers as quite contrived and awkward, in practice, it greatly expedites analysis of the system.

5.2.3.2 Dividing components into groups. Components are divided into groups and subgroups based on the organizations that are involved in the particular diffusion system being planned or analyzed. The decision as to how to group components is a purely pragmatic one. The major groups and subgroups in the bilingual-PIP diffusion system, for example, are:

- USOE
 - OBE
 - OPBE
- Diffusers (primarily TRCs)
- LEAs

In general, each group and subgroup will include all the kinds of components, that is, persons, materials, and so on, but each will have an identity or character of its own that is more than the sum of its parts.

5.2.3.3 Dividing processes into stages. So many processes are directed toward so many different goals in a diffusion system that an additional breakdown is required before a system description becomes manageable. This breakdown is a division into sequential "stages" of processes. The breakdown that has evolved for the particular case of PIP diffusion systems divides the overall diffusion process into four logically distinct stages (see Figure 7):

- Preparation for diffusion
- Selection/adoption
- Start-up
- Operation

Each stage is defined to include a specific set of processes. In the PIP model, Preparation includes all USOE and diffuser planning and all selection and training of diffusers prior to contacting LEAs with awareness activities. Selection/Adoption includes processes for creating awareness in the LEAs, for narrowing the choices to one or more suitable projects, and for obtaining commitment to adopt the project or projects. Start-Up covers getting ready for the first year of operation, and, in particular, includes those processes that need to be done only the first year. As described in the PIPs, start-up is an accelerated or altered version of the slow, evolutionary project development in many of the originating sites. "Operation" begins with the arrival of the first students in the project classrooms.

A fifth column, labeled "Initial Conditions" is also included in Figure 7. This column provides a place for listing all of the processes and outcomes relevant to the diffusion system prior to the defined beginning of the preparation stage. Since it has no specific beginning, "initial conditions" is not, strictly speaking, a stage. It is intended to eliminate the need for an infinite regression of preparation stages that would otherwise be required.

In practice, of course, the stages cannot always be separated neatly. Preparation continues into selection/adoption, and so on. But, in general, there are observable, intermediate outcomes that are identifiable for each stage, and it is these intermediate outcomes that make the study of a diffusion system possible. That is, while the ultimate outcome of the diffusion system is improved student performance and self-concept, there is no practicable way of evaluating the effectiveness of preparation processes by looking at student test scores (i.e., outcomes of operation). Each stage must first be analyzed separately, and then the outcomes of each stage (the skills, knowledge, content, roles, and availability of the components) must be considered in terms of their implications for the following stages.

5.2.4 Using the Descriptive Conventions to Develop a System Model

5.2.4.1 Sequence of model development. With the conventions for describing components and processes established, it is possible to consider how these two kinds of statements are actually used in developing a complete description or model of a diffusion system. The first step is to list all the components in the system, grouped appropriately under "USOE", "Diffusers," or "LEAs" and then to describe their initial conditions, that is, their characteristics prior to the beginning of preparation for diffusion. In general, it is not necessary to describe the status of individuals under initial conditions. For example, "LEA persons," (decision-makers, project director, project staff, non-project staff, parents, and community) are described in general terms, summarizing their status in potential adopter sites.

The second step is to consider all the preparation processes that act on the various components. Thus, USOE personnel are selected to oversee the diffusion effort, funds are allocated, plans are developed, and so on. In the diffusion group, USOE selects and trains diffusion agents, and the diffusers develop specific diffusion plans. At the LEA level, LEA personnel are not usually involved at this stage, but LEA plans and guidelines are being selected by USOE and packaged in the form of PIPs.

The results of these preparation processes are then described under the heading "preparation outcomes." The description of preparation outcomes is, in principle, a complete description of all system components, similar to the description of "initial conditions" but reflecting the new knowledge, plans, materials, and so on resulting from preparation processes. In practice, only the new or changed characteristics need be listed.

Next, the selection/adoption processes are described as they operate on the components, and changes in components are described under "selection/adoption outcomes." Similarly, "start-up" processes and outcomes are described, and finally "operation" processes and outcomes are described. The resulting description includes all components of the system, and follows all changes to them over the four stages of diffusion.

5.2.4.2 Levels of detail. The same basic conventions can be applied at any level of detail or generality. Thus, at one extreme, the adoption at a single site could be described in terms of the specific people and materials involved in all the groups and at all stages of the diffusion effort. At the other extreme, educational diffusion, in general, could be described in terms of generic groups and the processes acting upon them at each stage of diffusion. The decision as to how much detail to include is largely a practical one. In an evaluation of an elaborately planned diffusion system for highly structured projects, a high level of detail would be required to capture all of the places where things went wrong. In an exploratory effort such as the bilingual-PIP dissemination study in which relatively unstructured projects are diffused, a more general level of

description is required. All descriptions used in this study would be classified as quite general in their level of detail.

5.2.5 Project Models and Other Special Summaries

The model of the complete bilingual PIP diffusion effort provides the basic structure for organizing the raw data from the process evaluation, i.e., site visit notes, inputs from project directors and disseminators, and information from the Office of Education. In principle, all details of relevance should be included in the appropriate sections of the model; and the resulting model, which exists on paper as a lengthy, working outline, is the basis for all analyses in the study. To facilitate some of the analyses, however, several kinds of summaries are prepared from the model of the complete diffusion effort. The most important summaries are:

- a. The diffusion process summarized by the groups comprising the system (i.e., summaries of the rows of the model). For the PIP diffusion model, these are summaries of all processes (and related outcomes) affecting USOE, diffusers, and target LEAs, respectively.
- b. The diffusion process summarized by stages (columns of the model). This form is used in Section 7, Results and Analysis.
- c. Summaries of the project characteristics (called "project models" in this report).
- d. Summaries of local evaluation designs.

Evaluation designs are discussed in Sections 9-13 of this volume. The other three types of summaries are used in the process analyses, as described below.

5.3 Using the Models for Process Analyses

As already discussed, the basic approach used in the process evaluation is to (a) describe what was intended to happen in the diffusion system, (b) describe what actually happened, (c) analyze what went wrong, and (d) recommend ways to improve the system. The format for describing the intended, actual and recommended systems is provided by the model conventions, above. This section explains the approach to analyzing what went wrong and generating recommendations for improvements.

5.3.1 Comparing Project Models

The project models (see Section 5.2.5, above) provide a standard format for describing the management and instructional features of a project. Although the same information is included in the diffusion-system model, it is organized there to facilitate tracing the effects of diffusion activities on different project elements. The project models, by contrast, consist of a more familiar organization of the goals, instructional features and management features of the project. The project-model format is intended to provide a straightforward description of any project, whether or not it is involved in a diffusion system.

The primary use of the project models is to depict the overall impact of the diffusion system. Four kinds of models are involved in this analysis:

- a. Models of developer-site projects (four sites)
- b. Models of projects as described in the PIPs (four sites)
- c. Models of field-test-site initial conditions (19 sites)
- d. Models of field-test-site operation (19 sites)

In this study, the first and third kinds of models have been developed at only a very general level of detail. However, this level of detail is sufficient to permit comparison of all six possible combinations of the four kinds of models, as shown in Figure 8.

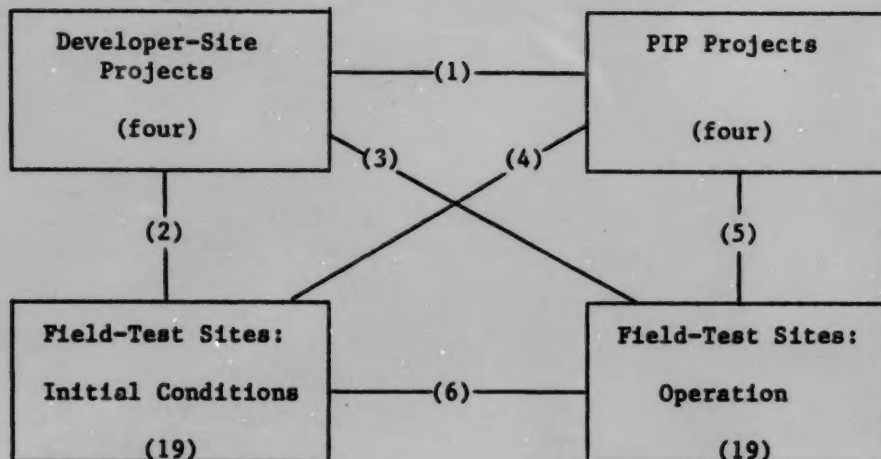


Figure 8. Project-model comparisons.

The questions implicit in Figure 8 may be summarized as follows:

1. Developer-site projects versus PIP-described projects: Do the PIPs describe the developer-site projects accurately?
2. Developer-site projects versus field-test-site initial conditions: Were the field-test sites different from the developer sites before the diffusion effort?
3. Developer-site projects versus field-test-site operation: How closely did the field-test sites replicate the developer-site projects?
4. PIP-described projects versus field-test-site initial conditions: Before the diffusion effort, were the field-test sites different from the projects as described in the PIPs?
5. PIP-described projects versus field-test-site operation: How closely did the field-test sites replicate the projects as described in the PIPs?

6. Field-test-site initial conditions versus field-test-site operation: Did the diffusion effort produce major changes in the field-test sites?

In combination, the pair-wise comparisons of the four types of project models answer the questions of how different the exemplary projects were from the pre-existing practices in the tryout-sites, and whether the diffusion effort resulted in changing the tryout-site practices to resemble the exemplary projects.

A seventh question became very important in the bilingual-PIP field test. This question was--"How closely did the field-test sites replicate something else (e.g., neighboring LEA programs, general Title VII guidelines, and so on)?" Such unintended outcomes may be important in most diffusion systems.

5.3.2 Identifying Diffusion System Problems

Once the impact of the system has been described, the diffusion system is analyzed to identify specific problems. First, the model of the intended diffusion system is compared cell-by-cell with the models of the actual diffusion systems for each TRC and tryout-site combination. This analysis begins where the comparison of the project models ends. The actual LEA operation of the project is compared with the intended operation as described in the PIP (Question 5, above). Outcomes are compared first, and where the actual outcomes fall short of intended outcomes, the processes designed to ensure those outcomes are examined. Where processes operated as planned but failed to produce the desired outcome, a notation is made of the inadequate process. Where a process failed to operate as intended, the outcomes from the preceding stage are examined to see why. In many cases it will be necessary to continue tracing causes back to the initial conditions stage; and in most cases, a tree-like chain of problems will be found to lie behind each outcome that is not met.

5.3.3 Determining Causes of Problems

In order to understand the role of the models in this analysis, it is useful to think in terms of two kinds of questions:

- What happened?
- Why?

The first question, and the one to which the models are addressed, includes: Which outcomes were not achieved? Which process or combinations of processes failed to operate? Which operated but failed to produce the desired results? The second kind of question is: What are the underlying reasons that the processes failed to operate or failed to produce the desired results? For example, a desired outcome, as included in the model, might be "positive staff attitudes." If negative attitudes were observed, the relevant processes in the model would be examined (e.g., training and orientation sessions), as well as relevant assumptions about initial conditions (e.g., no hostility toward bilingual education).

Following the model in this way would pinpoint where the problem occurred, but determining the reasons for the problem requires going beyond the model. There is no set procedure for determining reasons. Although educational diffusion studies and the work on diffusion done in the area of communications research provide many helpful insights, at this point the analysis becomes a matter of professional judgment and common sense (although, at least in principle, most problems for which the reasons are not obvious could be studied via appropriate experimental techniques).

5.3.4 Reversing the Direction of the Analysis

The above analysis is followed for each major outcome. The result is a set of overlapping problem sequences linking unmet outcomes of the earlier stages to subsequent difficulties. Once all recorded problems have been traced back to their causes, most of the weak points in the system will clear. The analysis is then reversed, starting with unmet

Initial Conditions and tracing forward through Preparation, Selection/Adoption, Start-up, and Operation in an attempt to identify any additional problems that had not been previously apparent.

5.3.5 Developing Problem Themes

Finally, the major unmet processes and outcomes are listed at each stage, and the consequences are summarized in the form of problem themes. An example of a major problem theme is the consequences of not having bilingual staff in the tryout sites. Availability of competent bilingual teachers is a precondition for all four PIP projects, and some consequences are (a) rejection by many sites of the projects at the Selection/Adoption stage, (b) utilizing bilingual aides in a major teaching role (which may lead to additional problems) or (c) consuming staff development efforts in teaching a second language to teachers, rather than training the staff in effective, bilingual teaching methods.

The problem themes, then, summarized across sites provide a picture of what went wrong and why. A summary of successfully implemented processes and successfully achieved outcomes provides a picture of what worked. Together, the complementary pictures of what went right and what went wrong constitute the starting point for recommending a more effective delivery system.

It should be made clear, that while describing the analysis approach is a rather laborious task, the approach itself is a very simple, common-sense way of looking for the causes of problems and the consequences of unmet preconditions. For the study of unsophisticated systems, the formalization of this part of the analysis processes has a relatively minor impact on the study results. It is the set of conventions for organizing the information into internally consistent models that is the key to the analysis. Once the models are completed, examination of the models for problems and their causes is relatively straightforward.

5.3.6 Using the Models for Planning and Revision

As mentioned above, the modeling process was also the key to preparing recommendations for diffusion systems that would meet various USOE goals. A major problem in developing successful diffusion systems in the past has been to take into account the many people, agencies, materials, and regulations that affect diffusion efforts, and to sort out the functions that each would have to fulfill if the systems were to work as intended. As a planning tool, the set of modeling conventions provides an aid to describing all of the components of an intended system, displaying their expected functions and interrelations, and relating the information gained from observing various existing diffusion efforts to the intended system. In this way a new system can capitalize on diffusion approaches that have been proven effective, and avoid reliance on techniques that have been shown to be ineffective.

6. METHODOLOGY

6.1 Instrument Development

6.1.1 Level of Detail for Data Needs

The descriptive models define the questions to be answered. That is, we need to know the status of each diffusion-system component prior to the preparation stage and at the end of each successive stage. We also need to know the processes acting upon each component (as well as the processes for which each component is responsible) at each stage. The practical concern in developing data needs is the level of detail at which to work. It may be adequate to deal with some components and processes at a very global level, while others may require highly detailed description and analysis in order to design a system that produces the desired results. The question is how to decide, since the solution of dealing with every aspect of the system in minute detail is simply not practicable.

The answer is that there is no formula that can tell us in advance what will be important and what will not. Basically, a process of informed trial and error is required. The approach described below is simply an orderly method of applying the trial and error approach. Fortunately, a great deal of experience has been gained in using this approach over a five-year period, and effective guidelines for proceeding have been established. Then too, the methods used result in an efficient trial and error approach. That is, except where past experience suggests the need for detailed data collection, data are collected at a general level. Then, where problems in the system are identified, additional, more detailed data are collected until the reasons for the problems are fully resolved. Thus, collection of unnecessary detail is minimized.

6.1.2 Individualized Interview Guides

6.1.2.1 Rationale. The conventional approach to conducting a large-scale study of this kind would be to generate a questionnaire for each

category of personnel, together with standard classroom observation and interview forms. Data would be collected in a uniform manner, which would lend itself to subsequent comparisons among sites.

In the current study, such an approach would not have been productive, in part because the sites were very different from each other, and in part because the study was basically exploratory. The wide variety of sites and the resulting variety of implementations meant that only a subset of any fixed questionnaire would have been relevant to any given site. The exploratory nature of the study required that the unique factors influencing implementation in each site be pursued in depth, a process to which standard questionnaires contribute little.

Furthermore, past experience has shown that the implications of isolated findings from a given site can only be understood in the context of a complete picture of that site. In other words, it is the interactions of site characteristics and events that provide meaningful insights, and these interactions are so varied from site to site that a single set of questions designed to capture all of the relevant interactions in all of the sites would have been so massive as to be impractical.

Clearly, what was needed was a system of questionnaires, unique to each site, but coordinated through a common plan for data analysis. In this study, the data-analysis approach described in Section 5.3 provided the coordination across sites. The small number of sites (in general, four sites per site-visit team) made it possible to develop individualized data collection instruments for each site.

6.1.2.2 Development of individualized interview guides. The purpose of the data collection visits was to develop a complete model of the adoption and implementation processes and outcomes for each site. The model of the intended diffusion system provided the preliminary content for each site model prior to the first site visit. The major source of information on the intended system was, of course, the set of PIPs. A second important source was the set of Title VII grant proposals from the

field-test sites. These documents provided a great deal of information about LEA initial conditions, as well as some indication of selection/adoption outcomes and LEA plans for actual start-up and operation.

One final source of information was available prior to the first round of site visits in this study. RMC site-visit teams attended an August meeting of field-test-site project directors and evaluators held by OBE in Maryland. By observing discussions among field-test-site and OBE personnel, RMC was able to fill in additional details of selection/adoption and start-up, as well as plans that had been developed for operation.

The development of interview guides then proceeded as follows: Prior to each visit, the existing (incomplete) model for each field-test site was reviewed, and the major gaps were identified. Those for which the information was expected to be available were listed, and the most likely sources of information were indicated. Finally, all questions were grouped by source, resulting in a list of questions to be discussed with each person at the field-test site.

For example, the start-up workshop is a feature of all PIPs. In general, the information as to if and when such a workshop had been held was available prior to the first visit. For a site that did not hold a workshop, only a single question was included for the project director as to why the workshop was not held. For a site that had held a workshop, questions as to the planning and operation were included for the project director, as well as questions about processes and outcomes for teachers, principals, and aides. A final review ensured that the major source of each kind of information was queried in detail, and that the time of try-out site staff was not wasted on redundant or unnecessary questioning.

Upon returning from each visit, the newly acquired information was used to update each tryout-site model (see Data Collection and Processing below). Then, prior to the next visit, the process was repeated, with new questions developed for each site.

6.1.3 Classroom Observation Guides

In planning the study, it was originally intended that classroom observation guides should be developed at two levels of detail. The first level, for use on the initial site visits, was to be individualized by PIP and was intended to determine the degree of adherence to PIP specifications at a very general level. A second, more detailed guide for subsequent visits was to be tailored to each site's special characteristics based on the findings from the first visit. The purpose of the detailed guides was to have been to focus data collection on those areas in which sites attempted to replicate PIP-specified project features and to avoid collecting data on conventional instructional practices that had been retained from pre-PIP days.

It became apparent from the first two rounds of site visits that the approach to developing second-level guides required some modification. The reason was a combination of the lack of specific classroom features described in the PIPs and the extent of adaptation on the part of the adopter sites. For example, the Venceremos PIP states that the teachers have flexibility in determining the appropriate language of instruction for individual students, but no specific guidelines are offered. Clearly, to describe instruction based only on PIP specifications would have resulted in an incomplete picture.

In order to provide the required structure for classroom observations, RMC made use of the project-model categories in the development of observation guides (see Volume II). These categories were derived from a logical analysis of bilingual-program management and instructional features, and were independent of specific PIP content or tryout-site features. In effect, the categories provided a common framework within which the four PIP projects and the 19 tryout-site projects could be described and compared.

The end result was that each team developed site-specific instruments for each visit based on (1) PIP-specified features, (2) the instruction section of the project-model categories, and (3) information obtained from the preceding site visits.

6.2 Data Collection and Processing

6.2.1 Data Collection

The development of data collection guides is described, above, under Instrument Development. This section indicates the types of data collection activity scheduled for each site visit. Typically, visits were from two to three days per site.

Data collection emphasis by site visit. It should be clear from the above discussion that, in general, the questions asked at the sites became increasingly site-specific with each visit. However, all sites were on somewhat similar implementation schedules, and the information that was available depended to a considerable extent on the timing of the visit. Thus, the focus of each visit was different and provided a unifying theme for each set of data-collection guides. The major emphases for the five scheduled visits are listed below. (In some sites, Visits II and III were combined.)

Site Visit I; Fall 1977

- Selection/Adoption Processes and Outcomes
- Start-Up Processes and Outcomes
- Plans for Operation
- Outcome Evaluation: Pretesting

Site Visit II; Winter 1977-78

- Project Operation Processes and Outcomes
 - Classroom operation
 - Instructional content
 - Management
 - Staff training

Site Visit III; Spring 1978

- Project Operation Processes and Outcomes
 - Changes since winter
 - Plans for second year

- Outcome Evaluation
 - Posttesting
 - Second-year plans
 - Observation of control groups

Site Visit IV; Fall 1978

- Project Operation Update
 - Project management
 - First-year classrooms
- Observation of New Second-Year Classrooms
- Outcome Evaluation: Pretesting Procedures

Site Visit V; Spring 1979

- Project Operation Update
 - Project management
 - Instruction
- Outcome Evaluation: Posttesting Procedures

6.2.1.2 Site Visit I: fall 1977. The first site visit took place at a point when Start-up was largely complete, and Operation was just beginning. The highest priority was to collect information on the selection/adoption and start-up stages, and the basic technique was to conduct individual interviews with the project director and relevant district administrators. In general, interviews were conducted by a two-person team following a questionnaire or interview guide developed specifically for the interviewee. For each interview, one team member took primary responsibility for asking questions and ensuring that all issues were followed up appropriately. The second team member took primary responsibility for recording answers.

Informal observation of project classrooms was the secondary activity for this site visit. A brief narrative description of classroom operation was recorded, indicating the general instructional approach, major similarities to and discrepancies from the PIP model, and where possible, the degree of uniformity across classrooms. In addition, plans for project

operation were reviewed with project directors and teachers, and pretesting procedures were discussed.

At the end of the first day of each site visit, the site-visit team compared their notes from the day with each other and with the preliminary site model. Discrepancies that could be resolved and items of missing information were listed for inclusion in the questions for the following day.

6.2.1.3 Site Visit II: winter 1977-78. The second site visit was scheduled for a time at which projects would be well underway. The major emphasis of these visits was classroom observation, with the intention of documenting instructional methods, determining instructional content, and recording the range of instructional materials in use. Each team attempted to observe at least four classrooms and to cover the major subject areas in which bilingual instruction was used. In general, the observations lasted about one hour per classroom, and were conducted by both team members. Observations were recorded simultaneously by the two team members, then combined onto a single form. Where possible, the combined form was completed on the same day as the observations are made.

Interviews were a secondary data collection technique for Site Visit II. Both the content and the persons to be interviewed varied widely from site to site. In most sites, at least some form of interview was held with classroom teachers. Other interviews depended on the characteristics of the project at each site and on the stage of implementation. In all cases, the project director was interviewed.

The third type of data collected included samples of forms, materials, tests, and other printed items. Items of special interest were class schedules, student assignment sheets, class record-keeping forms, locally developed materials and tests, and lists of published materials in use. In sites where efforts had been made to adhere to PIP recommendations, complete sets of such materials were obtained. Where major adaptations occurred, only illustrative samples are collected.

6.2.1.4 Site Visit III: spring 1978. Like Site Visit I, Site Visit III primarily involved interviews with project personnel; and procedures similar to those of Site Visit I were followed. The required information included reactions to the first year of the project, and plans for the second year. In most sites, the project director supplied most of this information.

Classroom observation was required in sites where the winter visits did not provide a complete picture of project instruction. This occurred because of large numbers of classrooms in the project, changes in classroom procedures, or scheduling problems that made it difficult to observe the complete range of subjects included in the project. In some sites, classroom observation of comparison groups was also required in order to assess the degree of similarity between treatment and comparison conditions.

6.2.1.5 Site Visits IV and V: fall 1978 and spring 1979. The second-year site visits included a combination of both interviews and observations. In all sites, the project directors and other project personnel were questioned on the details of second-year instructional content and methods. For sites having the most promising comparison groups and most satisfactory student outcome measures, every effort was made to observe both classroom operation and testing procedures during the visits. Thus, in all sites, the long-term (second year) impacts of the diffusion effort were recorded, and, for those sites best able to establish rigorous evaluations, a record of both testing and instructional procedures was available.

6.2.2 Data Processing

Data processing followed the data analysis approach described in Section 5, and took the form of organizing site visit notes into several complementary sets of information. The major headings are discussed below.

6.2.2.1 Site visit logistics. The first requirement upon returning to the office was to record a variety of details needed for future visits. Though not strictly part of process data analysis, this task was important to the successful collection of data on subsequent visits. Items recorded included: (a) schedule of site-visit activities, with times and places, (b) a list of site personnel met, with correct titles and contact information, and (c) a record of travel and lodging recommendations for future visits.

6.2.2.2 Model development. The major data processing activity was the reorganization of site-visit notes into the format of the site project and diffusion models (i.e., a concise outline for each site, organized according to model conventions). Generally, it was most efficient to begin with the notes in chronological order, and transfer each point to the appropriate model heading. Once all notes were processed, the model was reviewed for gaps, which were then filled in if the information was available. Where it was not, the gaps were flagged for inclusion in subsequent site-visit data-collection guides.

6.2.2.3 PIP revisions. All field-test site personnel involved in using the PIPs were asked to make notes in their PIP materials on problems that they encountered or on suggestions for improving the content. Some personnel were also asked, in the course of interviews, for specific revision suggestions. Upon returning from a site visit, each team collected all such suggestions from their sites in preparation for developing revision recommendations. However, since many site personnel did not use the manuals in any depth, and since it quickly became apparent that editorial revisions would prove inadequate, these notes became of minor importance to the study.

6.2.2.4 Site visit summaries. The final step in data processing was for each team to prepare a brief summary across all sites implementing the relevant PIP project. Each set of reports focused on the information of primary interest for the site visit in question, but did not identify sites by name. Instead, generalizations were drawn across the four (or more)

sites implementing each of the four projects. The resulting summaries indicated the common problems and successes, and pointed out those areas in which there was substantial variability among sites.

7. SUBSTUDY I: ANALYSIS AND RESULTS

7.1 Introduction

7.1.1 Overview of Results

The USOE system for disseminating bilingual PIPs represented a pilot attempt to diffuse exemplary bilingual projects to target LEAs (see Section 1.2, Synopsis of the Bilingual PIP Field Test). This exploratory effort involved only informal assessment of LEA needs and of projects available to meet these needs, and only very limited development of dissemination and technical support services. The overall results were:

- there was a rather modest response to the dissemination activities,
- the PIP projects only partially met the needs of adopter-sites,
- adopter-sites varied widely in their capacities to implement these (or any) bilingual programs, and
- the PIPs and related technical assistance systems were only partially able to meet adopter-site needs.

The immediate goal of the diffusion effort was for the field-test sites to implement the projects described in the PIPs. Thus, it might seem that the extent of replication in the field-test sites would be the major question of interest in this section. However, as will be seen, the question of whether or not replication occurred is largely a semantic issue. This was because of the level of generality of the PIP specifications and because most of the recommended procedures are fairly standard in bilingual programs. Therefore, similarities between the field-test site programs and the PIP specifications do not necessarily imply that "replication" resulted from the diffusion effort, nor do differences between the developer-site programs and the field-test-site programs imply that the field-test sites failed to follow PIP guidelines (see Section 7.6, Operation).

Furthermore, there were no compelling incentives to replicate the PIP-prescribed projects accurately while, on the other hand, there were

strongly competing influences in the forms of state and local regulations and policies that led to major departures from PIP specifications. The net effect was that, while the PIPs and the related technical support helped the adopter sites to varying degrees, this diffusion effort did not result in the accurate replication of exemplary bilingual projects.

7.1.2 Organization of the Analysis and Results Section

In this section, the intended PIP diffusion system is contrasted with the actual system as observed by RMC. The analysis is organized according to the framework shown in Figure 7. The major headings correspond to stages of the intended diffusion system, that is:

- Initial conditions
- Preparation
- Selection/adoption
- Start-up
- Operation

Under each heading, the components of the system (personnel, other resources, and plans and constraints) are divided into the three major PIP-diffusion-system groups (USOE, diffusers, and target LEAs). Within each group of components, the processes intended to affect these components, as well as the intended outcomes of those processes, are contrasted with the actual processes and outcomes that RMC observed. Under this organization, the replication question--Did the LEAs implement the intended projects?--is addressed primarily under LEA Operation, Section 7.6.3. Following the stage-by-stage analysis, the outcomes are summarized in Section 7.7.

It should be noted that this section, while organized according to the model of the intended PIP diffusion system, is only a narrative summary of the analysis that was carried out. This analysis consisted of generating an actual model for each field-test site following the detailed, intended model presented in Appendix E, then summarizing across site models. Summaries of the individual site models are found in Appendix A.

7.2 Stage 0: Initial Conditions

7.2.1 Overview

7.2.1.1 Definition of Stage 0. Strictly speaking, Initial Conditions is not a stage in the same sense as the other four stages of the PIP-diffusion model. Instead, it is a category provided in the framework in which to describe the status of the system components prior to the beginning of system activities. Thus, there is no specific time at which Initial Conditions begin. The category includes all relevant processes and outcomes prior to Preparation, which begins with the writing of the RFP for the bilingual-PIP study (late 1974).

A second distinction between Initial Conditions and the other four stages is that there is no "intended" model of Initial Conditions, since the "intention" derives from the system planners and, by definition, does not exist prior to Preparation. However, there can be discrepancies between the perceived Initial Conditions (as understood by the system planners) and the actual Initial Conditions, and some important discrepancies of this type are indicated below.

7.2.1.2 Major features and problem areas. Initial conditions that affected the diffusion-system outcomes were found for virtually every component of the PIP-diffusion-system model (Figure 7). Those with the greatest impacts are listed in Figure 9, which represents the Initial-Conditions column from Figure 7. These, as well as other relevant initial conditions, are discussed in the narrative that follows.

Note that the status of the PIPs (the central components of this diffusion system) is described under LEA materials, reflecting the convention

Stage 0: Initial Conditions (7.2)
<u>USOE (7.2.2)</u> <u>Personnel (7.2.2.1)</u> ● Pre-existing diffusion goals ● Knowledge of PIP-diffusion-system effectiveness ● Knowledge of target-LEA characteristics <u>Other resources (7.2.2.2)</u> <u>Plans and constraints (7.2.2.3)</u> ● Plans for the compensatory-education-PIP diffusion system ● Guidelines for selecting exemplary projects
<u>Diffusers (7.2.3)</u> <u>Personnel (7.2.3.1)</u> ● Pre-existing diffusion organizations <u>Other resources (7.2.3.2)</u> ● Established funding levels <u>Plans and constraints (7.2.3.3)</u> ● Established diffusion approaches
<u>Target LEAs (7.2.4)</u> <u>Personnel (7.2.4.1)</u> ● Decision makers - Information-seeking behavior - Readiness for change - Attitudes toward bilingual programs ● Potential project staff (skills and attitudes) <u>Other resources: PIPs (7.2.4.2)</u> <u>Plans and constraints (7.2.4.3)</u> ● Laws and regulations ● Existing bilingual programs in the target LEAs ● Exemplary projects potentially available for diffusion <u>Students (7.2.4.4)</u> ● Needs deriving from lack of language (and other) skills

Figure 9. Actual PIP diffusion system: Stage 0 key issues.

of grouping Other Resources (and Plans and Constraints) with the Personnel who use them or are affected by them rather than the personnel who develop them. Similarly, the projects available for diffusion are described under LEA Plans and Constraints because the ultimate role of these projects in the system is that of plans or guidelines for LEA programs.

7.2.2 USOE Initial Conditions

7.2.2.1 USOE personnel

Pre-existing diffusion goals. Prior to the time that the OPBE began preparing the RFP for the packaging of bilingual projects (late 1974), Congress and USOE planners had established the goal of assisting LEAs in implementing effective bilingual programs. ESEA Title VII was, of course the major tangible USOE program reflecting that goal. Secondly, there was a general goal of capitalizing on the successes in all USOE programs by diffusing the most effective projects and practices to other sites that could profit from them. Thirdly, there was an interest within OPBE in the use of packaging as a means of facilitating project diffusion, and there was the closely related philosophy that effective projects should be packaged and disseminated intact, since there was no practicable way of determining which set of project features was necessary and sufficient for success. The attempt to identify, package, and diffuse effective bilingual projects was a logical result of these goals and interests.

Knowledge of PIP-diffusion-system effectiveness. At this time (late 1974), little information about project diffusion via PIPs was actually available. The SRI/RMC field tryout of the original (compensatory education) PIPs had just begun. Initial results were positive, but there were several important differences between the first PIP tryout and the subsequent, bilingual PIP field test that were not yet obvious. In particular: (a) the compensatory projects were relatively limited in scope, with well defined instructional treatments. Most were pull-out labs that operated fairly autonomously within the school district, while the bilingual projects involved major changes to the existing school program; (b) by and

large, the procedures and materials of the compensatory projects were stable as compared to procedures and materials in the rapidly evolving field of bilingual education; and (c) the compensatory-project field-test sites were given large grants conditional on their following the packaged projects closely, while the bilingual sites had no such specific conditions written into their Title VII grants. However, these distinctions were not included in the reports available to USOE at that time.

Knowledge of target-LEA characteristics. Some of the key characteristics of the target LEAs are described below in Section 7.2.4. Individual USOE personnel were certainly aware of these characteristics to varying degrees, but subsequent planning of the bilingual-PIP diffusion system did not reflect an accurate, comprehensive understanding of the needs and resources of the target-LEA pool.

7.2.2.2 Other resources. While the USOE role in the bilingual-PIP diffusion effort was clearly influenced to some extent by the availability (or lack) of funds, materials, and facilities, these problems were outside the scope of this study. It seems safe to speculate, however, that the simple addition of such resources could not have changed the results of the field test substantially.

7.2.2.3 Plans and constraints.

Plans for the compensatory-education-PIP diffusion system. The dominant factor in the development of the bilingual-PIP diffusion system was the set of pre-existing PIP-diffusion efforts for compensatory education projects. Although the plan was modified somewhat for the bilingual-PIP diffusion effort (to make use of the TRCs), in the terminology of the diffusion-system model, the plans and guidelines for bilingual-PIP diffusion were "selected" from the compensatory-education-PIP-diffusion plans and guidelines, rather than "developed" specifically to meet the bilingual-project-diffusion goals. Furthermore, the "selection" process apparently did not involve any comparison of alternatives.

In fact, it appeared to RMC that the bilingual-PIP-diffusion system was the result of the chance conjunction of two OPBE research efforts-- (a) the RMC and SRI PIP studies, and (b) the AIR search for exemplary bilingual projects. It is easy to see that the initially positive results from the compensatory-project-PIP tryout and the existence of four JDRP-validated bilingual projects could have led quite naturally to the bilingual-PIP system. Subsequently, of course, this and other diffusion studies have shown that a much more systematic approach to planning a diffusion system is required in order to ensure success.

Guidelines for selecting exemplary projects. Identification of exemplary bilingual projects was already in progress in 1974-75, although formal planning of the diffusion system had not begun. At that time, there were no guidelines as to what project features were important in a package-based diffusion effort, and the major selection criterion was "convincing evidence of positive impact on student achievement."

Within this context of preliminary, incomplete information, OPBE proceeded with plans to package exemplary bilingual projects while, at the same time, monitoring the ongoing compensatory-project PIP field test for information that could be relevant to the later dissemination of the bilingual packages.

7.2.3 Initial Conditions of Diffusers

7.2.3.1 Diffusion personnel (preexisting diffusion organizations). Concurrently, OBE was developing the system of support centers for ESEA Title VII projects. The TRCs were one of three types of centers in the support system and were to focus on technical assistance to LEAs, while the other two types were developing and disseminating instructional materials. Thus, OBE had a dissemination system in place at the time the development of the bilingual PIPs was begun, although there was little or no coordination between the development of the OBE system and the PIP development effort. Furthermore, the TRC personnel were neither familiar with, nor always receptive to, the PIP diffusion concepts.

At the same time, other formal and informal dissemination systems were operating independently of USOE. These systems were operated by state bilingual offices, professional organizations, commercial publishers, and LEAs themselves. In addition, the Office of Civil Rights (OCR) and the Lau Centers, while not disseminating instructional practices per se, were having a major impact on directly relevant administrative and organizational features in some LEAs (i.e., desegregation of schools and establishment of bilingual programs). From the perspective of the LEAs, the new Title VII system was only one of many, and not necessarily the dominant one.

7.2.3.2 Other resources (established funding levels). The dominant initial condition under this heading was the established funding level for the TRCs. The absolute level of funding was not important to the diffusion questions, but the fact that a level had been fixed and that activities consistent with that level had been planned was to affect the capabilities of the TRCs to respond to the PIP-diffusion-system requirements.

7.2.3.3 Plans and constraints (established diffusion approaches). As was the case with funding levels, plans and guidelines for diffusion activities had been established by all TRCs before the PIP diffusion effort was initiated. These plans were not necessarily compatible with the PIP diffusion approach that was subsequently provided by USOE.

7.2.4 Initial Conditions in Target LEAs

Overview. The pool of LEAs relevant to this discussion--those with existing bilingual projects and those potentially requiring such projects --was not well understood (see Questions 2 and 4 in Figure 8). There appeared to be a tacit assumption among USOE personnel and throughout the community of bilingual educators that a few sites had developed exemplary, effective projects while most others had less effective projects or none at all. In retrospect, it now appears that this perception was inaccurate in two important respects.

First, like programs in other fields, the most effective bilingual programs (as distinguished from projects) were probably having much less

impact on student achievement than the existing evaluation reports had led the educational community to believe (see Section 3.2.5, Problems with LEA Evaluation Reports, and Volume III, Appendix A, How Big Are Achievement Gains?). Second, by and large it appears to have been the "contexts" (i.e., the teachers, students, LEA decision makers, parents, and community) that were the dominant factors in program effectiveness rather than the "projects" (i.e., instructional methods and materials, organization, and so on). That is, since we know that even substantial changes in classroom techniques have rather small impacts on student achievement, and since the exemplary programs included few, if any, unconventional instructional approaches, it is fairly safe to conclude that the effective programs were the result of the competent, enthusiastic application of conventional bilingual approaches rather than of the development of new, more effective approaches to teaching. Thus, while the LEAs with less effective programs (or none at all) had a great deal to learn from the effective programs, much of the information consisted of how the effective programs had applied widely known management and bilingual instructional approaches to meet their local needs. Little, if any, information on unique or innovative approaches was available.

An additional set of factors that subsequently had a major impact on the bilingual-PIP diffusion system involved the heterogeneous nature of the target LEA pool. Of course, no two LEAs were exactly alike, and there were many dimensions on which they differed, but from a diffusion perspective, three of these dimensions were especially important: (a) language (Spanish or French); (b) information-seeking behavior (active or passive); and (c) previous bilingual-program experience (extensive or limited).

All of these dimensions are discussed elsewhere in this report. The point to be made here is that even this very rough breakdown (into three dimensions with two values apiece) defines eight categories, each of which requires a different diffusion approach. Furthermore, the number of LEAs in each category is an important factor in determining the most cost-effective approach to diffusion. If, for example, there were only a few

experienced, French-language LEAs actively seeking new information, it might be more cost-effective to organize a conference or series of advanced-level workshops than to spend several years developing and field-testing costly, stand-alone packages.

The information about the basic differences among target LEAs was, of course, available during the initial conditions stage. The importance of considering the target LEA pool as a set of distinct subgroups, each requiring a different diffusion approach, was not as obvious and was not reflected in the experimental diffusion effort.

7.2.4.1 Target-LEA personnel.

Decision makers. The attitudes of the local decision makers, especially their motivations to adopt bilingual projects and their attitudes toward change, are critical factors in the success of a diffusion system. It was clear from field-test-site reports that the potential adopter LEAs varied widely in their motivations for adopting bilingual projects. All were subject to pressure from federal court decisions. Many needed to meet state requirements. Many were also subject to local pressures (for or against bilingual education) from parents and community and from within the LEA. The availability of Title VII funds was an incentive or facilitating factor for many LEAs. However, local educators generally believed that their situations were largely unique to their own districts, and no evidence was found in this study of any interest in precise replication of exemplary projects from other districts.

Information on attitudes toward change (i.e., introducing bilingual programs or modifying existing programs) was not collected from the entire pool of target LEAs, but it was clear from TRC records and interviews with TRC staff that the LEAs differed widely in the types and the amounts of information-seeking behavior they exhibited. The implication was that many of the LEAs with the greatest needs for new or improved programs were not disposed to seek out information on exemplary projects or to respond actively to a PIP-type awareness effort.

Potential project staff. The major resources required for implementing bilingual programs were skilled management and bilingual teaching staff, and these personnel were in short supply throughout the pool of potential adopters. Both language skills and bilingual-program experience were scarce, although they were available at some sites as will be seen below.

Attitudes of potential project staff members also varied. Many potential project directors and bilingual teachers were actively interested in bilingual programs or were receptive to the idea when it was presented, but there were (and are) enough school personnel who oppose bilingual programs to make this an important factor for diffusion system planners to consider.

7.2.4.2 Other resources (PIPs). This section describes the background of PIP-type packaging. Of course, the PIPs were not the only "other resources" relevant to the PIP-diffusion effort. The lack of adequate tests was also a major problem, but this issue is discussed under Substudy II. Some problems also resulted from the lack of instructional materials or facilities available to various field-test sites but, by and large, these were secondary issues. It was the preexisting concept of PIP-type packaging that was the major factor in determining the nature of the PIP-diffusion effort.

The background presented here is only that related to the PIP packaging and diffusion concepts. The background relating to the contents of the PIPs (i.e., to the identification of projects for packaging and diffusion) is described below under Plans and Constraints.

PIP concepts. In attempting to diffuse exemplary projects, USOE has pursued two approaches. One has been to fund the project developer to work as a consultant to adopter sites. The second, packaging, has been an attempt to find a more cost-effective alternative. It was reasoned that if exemplary projects were carefully analyzed, and how-to-do-it manuals were prepared presenting the essential features of the projects,

then adopter sites might be able to replicate the projects faithfully with very little technical assistance. Although a wide variety of projects had been described in an equally wide variety of publications under both private and government sponsorship, the initial RMC PIP contract was the first attempt by USOE to develop materials that were comprehensive enough to stand alone in supporting an adoption (see the Overview of the Seven USOE PIP Studies, Section 1.3).

The basic PIP concepts that predated the bilingual PIP development were (a) stand-alone packages, (b) whole-project adoption, and (c) rapid start-up. The stand-alone-packaging concept was always qualified by USOE personnel, who recognized from the beginning that some technical assistance would always be needed. Whole-project adoption is discussed below under "Project Selection."

The concept of rapid start-up was a fundamental PIP principle in the sense that the purpose of diffusing existing projects was to provide an alternative to the slow process of reinventing similar programs in each LEA. However, the specific approach to start-up and the PIP emphasis on start-up activities evolved as RMC developed the first prototype and revised compensatory-education PIPs. This start-up approach was tailored to the characteristics of the compensatory-education projects which, as will be seen, were quite different from the bilingual projects.

PIP-development time schedule. The original six PIPs were prepared by RMC in prototype form during the 1973-1974 school-year. During the following two years, the prototypes were tried out in 19 sites and evaluated by SRI International (Stearns, 1975) with RMC as subcontractor. The information obtained during the first year of the tryout was used during the second year by RMC to redesign and rewrite the PIPs.

As can be seen in Section 1.3, the time sequence of the various PIP studies was an important factor in determining the form of the bilingual PIPs. The identification of the four bilingual projects took place during the first year of the prototype-compensatory-education-PIP field test.

The actual development of the bilingual PIPs coincided with the revision of the prototype PIPs. Thus, although we treat the existence of the revised PIP format as an initial condition that predated the preparation stage of the bilingual-PIP-diffusion effort, strictly speaking the revised PIP model did not exist at the time that CEMREL visited the developer sites for the bilingual projects, and this format was not adopted until after preliminary drafts of the CEMREL packages had been completed. This led to inconsistent levels of detail within the PIPs, since CEMREL's information was incomplete for some sections of the PIP manuals.

The PIP format. The bilingual PIPs, like the revised, compensatory-education PIPs, each consisted of a set of manuals. In general, a different manual was prepared for each type of project staff member: project director, teacher, instructional consultant, evaluator, and so on. Since staff positions differed from one project to the next, the sets of manuals also differed somewhat. In all the PIPs, however, the key manual was the Project Management Directory, which was designed for use by the project director. A typical Project Management Directory was about 175 pages long with the following table of contents:

Chapter 1:	Project Overview
Chapter 2:	Using the PIP
Chapter 3:	Management Approach
Chapter 4:	Communicating with School and Community
Chapter 5:	Continuing Beyond the First Year
Chapter 6:	Budget
Chapter 7:	Selecting Students
Chapter 8:	Classroom Implementation
Chapter 9:	Selecting Staff
Chapter 10:	Staff Development
Chapter 11:	Staff Relationships
Chapter 12:	Materials/Equipment
Chapter 13:	Facilities
Chapter 14:	Goals
Chapter 15:	Task Checklists

Each chapter listed the relevant project goals and the associated tasks for the project director, then provided a narrative discussion of the topic, illustrated with occasional charts or forms from the developer site.

Manuals for all other staff members retained the same format as the Project Management Directory but were generally shorter in length and restricted to the topics most relevant to the target audience. In principle, each staff member was intended to have a personal copy of an appropriate manual. Within each PIP, some of the same information was repeated in two or more manuals (e.g., the Project Overview). However, in order to find all of the information in the PIP, it would be necessary to read all of the manuals and, for this reason, the project director was intended to have a complete set.

In general, the PIPs did not include curriculum materials. Rather, the projects relied heavily on commercial materials, and the PIPs listed the materials and described how to order them. In some cases, however, locally made materials played a major role in the developer sites, and some of these materials were reproduced for inclusion in the PIPs.

PIP awareness and selection materials. Awareness and selection materials were also prepared. These materials included:

- An Analysis and Selection Kit (ASK) consisting of an overview brochure containing brief descriptions of all projects, a booklet to be used as a guide to selecting among the projects, and individual project-description booklets. The booklets were packaged in a plastic bag.
- A set of criteria checklists and budget worksheets designed to assist LEAs in evaluating the feasibility of implementing a specific PIP project.

- A set of project orientation materials including posters, leaflets, and plans for orientation meetings. These materials were designed to aid potential adopters in securing the support and commitment of school and community persons for the selected project.
- A set of materials for disseminators, including suggestions for promoting the projects, offering technical assistance to LEAs, and monitoring project start-up and implementation.

7.2.4.3 LEA plans and constraints. There are three kinds of system components that fall in this category and for which the initial conditions had a major impact on the PIP-diffusion effort. These were: (1) laws and regulations; (b) existing bilingual programs in the target LEAs; and (c) exemplary projects potentially available for diffusion. Laws and regulations (local, state, and federal) constrained field-test sites in a variety of ways. Many target LEAs, including most of the field-test sites, had already implemented some forms of projects for students with limited-English proficiency, and these projects heavily influenced the PIP-project adoptions. The specific influences of these laws, regulations, and established programs are discussed under the subsequent stages. However, the exemplary projects available for adoption were at least equally important in determining the results of the bilingual-PIP diffusion effort, and the approach to selection constituted a key initial condition for this effort.

While there have been many attempts to identify exemplary projects over the years, the bilingual PIPs can probably be traced most directly to a USOE-sponsored study by AIR (Hawkrige, D. G., Chalupskey, A. B., and Roberts, A. O. H., 1968). This study was presumably motivated by the feeling that at least some federally supported projects developed in local school districts were dramatically effective and that, since many other federally funded projects were clearly not living up to expectations, it behooved the government to identify the successful ones and make their approaches available to all.

In this and subsequent AIR searches, the focus was on projects for the educationally disadvantaged, with a major emphasis on ESEA Title I projects. Over a period of several years, AIR found two dozen or more projects that met their criteria of effectiveness. Some, though not all, of these were reconfirmed as exemplary in follow-up studies. USOE considered the results of the searches positive enough to justify an effort to diffuse successful projects to other interested LEAs.

Additional searches using revised criteria were carried out in order to select projects for diffusion via PIPs. The first RMC PIP study identified six projects for educationally disadvantaged students (Tallmadge, 1974). Subsequently, CEMREL Inc. of St. Louis identified and packaged six more such projects. Concurrently, AIR had conducted a search for exemplary bilingual projects (Campeau, et al., 1975), and it was four projects identified in this study that were subsequently packaged by CEMREL as the bilingual PIPs.

Validation of project effectiveness. In the meantime, an additional consideration had been added to the identification process. USOE had established the Dissemination Review Panel (DRP) in 1973 to review the evidence of effectiveness for all projects to be disseminated under USOE sponsorship. NIE subsequently joined in the review process and the Joint Dissemination Review Panel (JDRP) was formed.

The immediate impact of the DRP/JDRP was to require all candidates for exemplary project status to prepare somewhat more careful evaluation reports. From a dissemination viewpoint, there were three important results. First, JDRP review became, in effect, the major USOE review process for project selection. Second, since impact on student achievement was a major criterion for JDRP approval, and since few projects can demonstrate such gains, evidence of achievement gains became the dominating criterion for selection in the AIR (and RMC) search. Finally, since the JDRP could not, in general, determine which parts of a project produced its alleged benefits to students, USOE adopted a policy of disseminating JDRP-approved projects intact. Adopter sites were expected to

adopt all of the project if they were to receive federal support for their adoption. JDRP approval was a key criterion in the selection of projects for PIP packaging, and the concept of whole-project adoption was central to the PIP design.

Two-language versus multiple-language projects. This study did not include a survey of available, exemplary projects beyond those packaged in the PIPs. Those four projects are described under the Preparation stage, below. However, one important distinction that came up repeatedly in informal discussions during the study can be noted here. This is the distinction between two-language projects and multiple-language projects. All of the PIP projects fell into the former category. That is, the projects applied either to LEAs where English and Spanish were the only languages spoken, or to LEAs where English and French were the only languages spoken. Analogous projects exist for a variety of other languages, and these projects share many features that are independent of the specific language involved.

A quite different problem is presented where many different languages are found in a single school, often including several Asian languages and several European languages. In some cases, the bilingual-program students are primarily new arrivals who may speak no English at all. While such LEAs appear to represent an important part of the target-LEA pool, their needs are not addressed by the types of projects described in the four bilingual PIPs. Although a search for exemplary, multiple-language programs was beyond the scope of this study, the experience of the RMC staff suggests that the pool of such projects is not large.

7.2.4.4 Target students. The final, and ultimately most important, component of the system is the student population. Target LEAs outside of the 19 field-test sites were not studied here, but students in the field-test sites probably represented much of the range in the total target-LEA pool. The generalizations below are based on the reports of teachers and project directors as well as on observations made by RMC staff during site visits and on test scores from the LEA evaluation reports.

In order to describe the general nature of the students being served, it is essential to view the Spanish-English projects separately from the French-English projects. With the exception of Puerto Rico, the linguistic characteristics of the students being served in all of the Spanish-English sites were comparable to those of the originating sites. Many of these students came from homes where only Spanish was spoken, while some came from bilingual home environments. In one of the fifteen Spanish-English sites, the number of such pupils was small relative to the total number of students in the project. In some sites, most project students appeared to be more comfortable in Spanish while in others, English was preferred, especially by second-grade students. In Puerto Rico, of course, all of the students were Spanish speaking, and English was taught as a foreign language. In the four French-English sites, the students were not fluent in French although French was spoken in some homes. In at least 15 sites, the target students were generally underachieving, in some cases substantially so. These characteristics of the students affected the nature of the programs that were implemented, and also affected the interpretation of impact evaluations (Sections 9-13 of this volume).

7.2.5 Summary of Status and Problems: Initial Conditions

The description of initial conditions, above, focuses on the problem areas facing the bilingual-PIP-diffusion-system planners at the time active planning and preparation began. The major problem areas, as seen in retrospect, are summarized below.

7.2.5.1 USOE. The system planners from USOE brought to the planning task (a) a goal of diffusing intact, exemplary projects, (b) an approach to selecting projects for diffusion, and (c) an experimental, PIP-based delivery system. Now, six years later, it is clear to RMC that the goal of diffusing intact, exemplary projects is appropriate only for limited types of projects and is inappropriate for bilingual projects. The approach to selecting exemplary projects, which relied heavily on apparent achievement impacts and did not separate project effects from context effects, has also proven to be inappropriate. Finally, the PIP-based

delivery system, with its heavy reliance on packaging, has not proven to be well suited to bilingual programs or to the needs of the target LEAs.

However, this information was not available during the period we have labeled "Initial Conditions." The concept of exemplary programs was widely accepted in the educational world; the approach to selection of projects was also widely accepted, and the PIP concept, though subject to widespread skepticism, had proven remarkably effective in early tryouts. Furthermore, the entire field of bilingual education was in a state of dynamic development, and it is not surprising that the needs and resources of the target LEAs were not well understood. Finally, USOE had not developed any systematic approach to planning large-scale diffusion efforts. Thus, it is not surprising that there were problems with the experimental PIP-diffusion efforts.

7.2.5.2 Diffusers. The PIP diffusion agencies, in particular the TRCs, were new and essentially untried. While their diffusion activities were still in a stage of development, these activities did not include the use of PIPs, and some of the TRCs were not receptive to the PIP concept. Furthermore TRC budgets were fixed without provisions for PIP-diffusion activities. Thus, the TRCs were not in a position to contribute major technical support services to the PIP delivery system.

7.2.5.3 Target LEAs. The target LEAs varied widely in terms of student needs, motivations to adopt bilingual programs, experience with such programs, information-seeking behavior, and availability of appropriate staff. Thus no single approach could be expected to be appropriate for all target LEAs.

The obvious solution would be to categorize LEAs according to relevant characteristics for the purpose of planning different diffusion approaches. However, the number of LEAs in a category would then become a major factor affecting the diffusion approach. That is, an approach that might be cost-effective for a large group of LEAs might not be cost-effective for a smaller group.

7.3 Stage 1: Preparation

7.3.1 Overview

7.3.1.1 Definition of Stage 1. The preparation stage is intended to include all activities related to the development of the PIP-diffusion system prior to the actual dissemination of awareness materials to the sites. We have defined the stage as beginning with the selection of projects for packaging (Study 3, 1974-1975) although, in fact, the selection contract was relatively independent of the other packaging-investigation studies. The stage continues through the briefing of TRC personnel on their required PIP-diffusion activities (November 1976).

7.3.1.2 Major features and problem areas. The major activities of the preparation stage were (a) selecting the four exemplary bilingual projects, (b) developing the four PIPs, and (c) training the TRCs for their role in the diffusion system. The results of these and other relevant activities are organized according to the major headings of the PIP diffusion model, as shown in Figure 10.

7.3.2 USOE Preparation

7.3.2.1 Personnel.

Defining explicit goals. The general USOE goals were described under Initial Conditions (7.2.2.1). In retrospect, it appears to RMC that a desirable first step in developing the diffusion system would have been to refine these goals into explicit statements that could have guided the design and implementation of the system. As noted under subsequent stages, conflicts among different goals, especially between the research goals and the goals of serving the LEAs, produced a certain amount of confusion as to how much adaptation of the PIP-defined projects was permissible.

Analyzing exemplary projects and target LEAs. A second important activity would have been for USOE personnel to inform themselves in more

Stage 1: Preparation (7.3)
<u>USOE (7.3.2)</u> <u>Personnel (7.3.2.1)</u> • Defining explicit goals • Analyzing exemplary projects and target LAs • Training for diffusion tasks <u>Other resources (7.3.2.2)</u> <u>Plans and constraints (7.3.2.3)</u> • Plans for USOE participation in the diffusion effort
<u>Diffusers (7.3.3)</u> <u>Personnel (7.3.3.1)</u> • Selection of diffusion personnel • Training of TRC personnel <u>Other resources (7.3.3.2)</u> • Funds and materials <u>Plans and constraints (7.3.3.3)</u> • The USOE-developed diffusion plan
<u>Target LEAs (7.3.4)</u> <u>Personnel (7.3.4.1)</u> • Capacity building <u>Other resources (7.3.4.2)</u> • Development of the PIPs <u>Plans and constraints (7.3.4.3)</u> • Selection of the projects <u>Students (7.3.4.4)</u> • No activities during preparation

Figure 10. Actual PIP diffusion system: Stage 1 key issues.

depth as to the characteristics of projects available for diffusion and the needs and resources of the target LEAs. The many negative consequences of not conducting this kind of "market research" are discussed throughout this report.

Training for diffusion tasks. Preparation for USOE staff was about at the same level as for TRC personnel, described below. According to plan, as soon as grants were awarded, OBE Program Officers were to take over from the TRCs as the main USOE contacts for LEAs. TRCs were to continue to provide training support. Like the TRC personnel, the OBE program officers became familiar with the PIP materials and the projects they described but did not do an in-depth analysis of project features and were not trained to provide technical support on program implementation.

7.3.2.2 Other resources. No major issues.

7.3.2.3 Plans and constraints. General plans for the activities of USOE personnel in the diffusion effort were prepared by OPBE and OBE, and it becomes a value judgment as to whether more formal or more elaborate plans were called for in what was clearly an exploratory effort. Certainly, problems arose that could have been eliminated by more thorough planning, and we would assume that more effort would go into the planning of a large-scale, operational system. However, in RMC's judgment, the plans (or lack of plans) covering the activities of USOE personnel, while they contributed to some of the problems described under selection/adoption, start-up, and operation, were not critical factors in the success or failure of the diffusion system.

7.3.3 Preparation of Diffusers

7.3.3.1 Personnel.

Selection of diffusion personnel. Although, to RMC's knowledge, there were no formal plans for selecting diffusion personnel, the implicit

intention was to find diffusers who would promote awareness, help LEAs in project selection, and provide technical assistance as required. The TRCs, having been recently established as the OBE technical assistance centers were an obvious choice.

The decision to use the TRCs was consistent with the approach in the parallel, compensatory-education-PIP diffusion effort which, at that time, was contracting with professional diffusion groups (labeled "diffusion contractors") to provide awareness and technical assistance activities. It should be noted, however, that the diffusion contractors were used as a temporary system, and that subsequently the compensatory-education PIPs have been disseminated by the National Diffusion Network (NDN), with technical assistance provided by the developer sites. The bilingual-project developer sites were not involved actively in the bilingual-PIP-diffusion field test, nor were SEA or other established diffusion groups included in any formal sense. Given the exploratory nature of the field test, it is not surprising to RMC that the nominal dissemination and technical assistance responsibilities were restricted to the TRCs. However, as will be seen in the discussions of the following stages, the actual diffusion process was heavily influenced by persons outside of the TRCs.

Training of TRC personnel. Training of the TRC personnel for PIP diffusion was minimal. The first eight TRCs began operation in 1975-76, the same year that the bilingual PIPs were developed. Seven more TRCs began operation in 1976-77, the year of the bilingual-PIP dissemination effort. The TRCs were organized by OBE, while the PIP development was directed independently by OPBE. Coordinated planning by OBE and OPBE for the dissemination of the PIPs by the TRCs was carried out in September and October 1976. The formal "training" of the disseminators was a one-day orientation workshop conducted by OPBE and OBE and attended by one representative from each TRC plus many of the OBE program staff. The workshop was held on November 3, 1976 and covered the content and format of the PIP materials as well as the intended dissemination process. Given the brevity of the workshop, only general briefings were possible. For example, two hours were scheduled for review of the PIPs and related awareness booklets,

a set of materials comprising on the order of 3,000 pages. Additional familiarization was left to the TRC personnel themselves.

The outcome of these processes was that, by and large, the TRC personnel had a good understanding of the structure of the PIP materials and of the dissemination processes they were supposed to follow (see selection/adoption, below). They received little training on the features of the projects, however, and they had little incentive or time to analyze the projects in depth on their own. Subsequent indications were that they had a rather superficial understanding of the projects and of the differences among the projects.

Attitudes of TRC personnel differed widely. Many were skeptical of the PIPs as an approach to diffusing projects. Some felt that the projects described in the PIPs were not the best ones available. In all cases, the dissemination activities imposed an unexpected task on the TRCs, half of which were just getting started, and no extra funds or staff were provided by USOE. Some reacted negatively to this extra work load.

7.3.3.2 Other resources: funds and materials. As indicated above, no special funds or other resources were provided to the TRCs for their PIP dissemination activities. A brief, disseminator's guide developed for the compensatory-education PIPs was adapted for the use of TRC personnel. In principle, one might expect such materials to be quite helpful in guiding the TRC use of the various PIP awareness and LEA training materials. However, the disseminator's manuals for both bilingual and compensatory-education PIPs were largely unused and, based on this result, we doubt that such a manual could have had much impact on PIP dissemination unless the manual were incorporated into some form of intensive training workshop for the TRC diffusion personnel.

7.3.3.3 Plans and constraints (the USOE-developed diffusion plan). The diffusion plan, summarized under selection/adoption (7.3.4), was developed by USOE and presented to the TRCs in the November 1976 briefing. The plan was apparently clear to the TRCs but, in the terms of the

diffusion model, the "image" of the plan was that of a set of regulations imposed from above. From discussions with TRC personnel, we conclude that this negative image contributed to the lack of enthusiasm on the part of some TRCs.

7.3.4 Preparation of Target LEA Components

7.3.4.1 Personnel (capacity building). Under the conventions of the bilingual-PIP-diffusion model, preparation of LEA personnel for diffusion could include both skill building and developing readiness for change. Neither kind of activity was included in this experimental effort, and the outcome was that many target LEAs were neither ready to adopt the PIP projects nor capable of providing personnel with the required skills (e.g., bilingual teachers).

7.3.4.2 Other resources (development of the PIPs). PIP development was by far the dominant activity in the preparation stage. Following normal USOE procedures, packaging was done by an outside firm (CEMREL Inc.) under contract to OPBE. In the terminology of the diffusion model, packaging skills were "selected" rather than "trained" (see Section 5.2.2.2). That is, it was implicitly assumed that the packaging contractors could produce appropriate materials with no more training than a brief period of orientation to the PIP studies already completed or in progress. Of course, as noted under initial conditions, the entire effort was exploratory, as very little information existed on how to package exemplary projects. The results of the SRI/RMC PIP field test and revision study (Studies 2 and 3) were made available to CEMREL as the study progressed and, ultimately, the revised, compensatory-education PIPs were used as models for the bilingual-PIP format and content.

The packaging of the four bilingual-PIP projects was carried out during the 1975-1976 school year, the same year that RMC was rewriting the original six compensatory-education PIPs. Although CEMREL was thoroughly experienced in a variety of packaging techniques, they had not been previously involved in searching for exemplary projects, in bilingual

education, nor in the analysis of projects for PIP-type (comprehensive, how-to-do-it) packaging. With only one year and a limited budget within which to package four bilingual projects as well as search for and package up to eight compensatory projects, USOE decided that the design of the revised, compensatory-education PIPs should be adopted for all of the bilingual PIPs. In the fall of 1975, CEMREL visited each project for several days to identify project features. Then, in the spring of 1976, as the RMC manuals were completed, CEMREL received early copies and prepared manuals for the bilingual projects following the general format of the RMC PIPs.

The outcome of the PIP development effort was a set of four PIPs--50 copies of each. According to the developer-site personnel, the descriptions of their projects were fairly accurate in most respects. However, due to the nature of the projects, the descriptions were at the level of general guidelines rather than specific instructional and management techniques. This reflects the fact that the developer sites themselves apparently operated largely on the basis of general guidelines interpreted by skilled and enthusiastic staff (see Question 1 in Figure 8).

The bilingual PIPs were, in appearance, much like the revised, compensatory-education PIPs. In fact, of course, there was a major difference in the amount of development effort represented by the two sets of packages. The revised, compensatory-education PIPs incorporated the experience of three years of development, extensive field testing, and revision. The field testing brought in the insights of nineteen project directors and many expert teachers and administrators, and the revision effort allowed RMC staff to revisit the developer sites for additional information after a full year of watching adopters struggle with a variety of problems. Having observed the problems faced by adopters, RMC was able to focus on the exact methods used by the developers to solve these problems and to emphasize these solutions in the revised PIPs. By contrast, CEMREL was able to make only one or two brief visits to basically unfamiliar types of projects. The bilingual PIPs were limited to the information gained on these visits plus a limited amount of additional input from the

developer-site project directors. Further, the format for the PIPs was not available until well after data collection had ended and some sections had to be written without complete information from the developer sites. Thus, while the bilingual PIPs reflected the appearance of the revised RMC PIPs, the stage of development was more analogous to the first RMC prototype PIPs.

The problems with the bilingual PIPs were of several types. In general, they were designed for an unspecified audience without adequate provision for the different levels of experience and resources among the target LEAs. They lacked specific instructional guidelines, and there were many specific problems characteristic of prototype materials. One of the purposes of the field-test was, of course, to identify and correct such problems. However, while we were sensitive to these problems, in RMC's judgment the real problems with the diffusion system were much more fundamental, and could not be resolved by revising the PIPs. We are convinced that a successful diffusion effort is unlikely unless all elements of the diffusion effort are addressed systematically, as discussed throughout this report.

7.3.4.3 Plans and constraints (selection of the projects). The selection of the projects for packaging did, of course, precede the development of the PIPs. Under the conventions of the PIP-diffusion-system model, however, the projects are treated as plans to be used by the target LEAs to establish bilingual programs, and thus the selection process is described here under the heading of LEA plans and constraints.

The AIR search for exemplary bilingual projects began in mid-1974. The search is described in detail in Campeau et al (1975). Briefly, AIR and USOE established project selection criteria that were systematically applied to every candidate for exemplary status that AIR could locate. Among the criteria was "evidence of statistically and educationally significant impacts on student achievement," the criterion to be reviewed by the JDRP as a condition for USOE-sponsored dissemination. Given the limited amount of impact that can reasonably be expected from improvements in school instruction, and given also the lack of methodology for precise evaluation of such projects (Horst, 1977) this criterion constituted a severe limitation on the number of exemplary projects that could be found.

AIR eventually submitted seven project evaluations to the JDRP, and four were approved as convincing. It was these four projects that were subsequently packaged by CEMREL.

Two points should be emphasized. First, although many other criteria were used by AIR, and the leading candidate projects were site-visited to confirm the existence of their program features, the availability of convincing achievement data played a decisive role in the selection of the bilingual projects. Second, both the project features and the evaluations reflected the state-of-the-art prior to 1974. Both of these factors have proven to be important in the 1977-1979 field test of bilingual PIP projects, since neither the project features nor the evaluation methodology were entirely suitable for diffusion.

Selection outcomes. The outcome of selection was the set of four projects. All of the projects were intended for grades K through four, all had similar staffing patterns, all specified starting with the first two grades and expanding upward one year at a time, and all were for similar student populations. None dealt with small groups of non-English speaking students or with mixes of non-English languages. Subsequently, these project features played a major role in determining the market for the PIPs.

When comparing the features described in the four PIPs with each other, most differences appeared to be minor and unrelated to either the effectiveness of the projects or the contexts in which they were designed to operate (see Appendix C for a detailed analysis). Among the more apparent differences were minor variations in staffing patterns (e.g., use of curriculum coordinators and other support staff) and the use of team teaching in one project. In both cases, the differences appeared to be artifacts of local conditions and policies rather than carefully planned, unique features of the bilingual programs.

The lack of uniqueness was a factor of particular concern. Although the projects as described in the PIPs were not compared systematically with bilingual projects in the entire pool of potential adopters, there

is nothing to suggest that major qualitative differences would be found. There were undoubtedly large differences in how well other districts were implementing their programs, but at the level of description provided in the PIPs, many districts could claim to have the same features as the four exemplary projects. The 19 field-test sites reported that they saw little that was dramatically innovative in the projects and, therefore, did not hesitate to try to improve upon the projects.

In the introduction to this report, project factors favorable to successful diffusion are contrasted with factors unfavorable to diffusion (Section 2.2.2.2). The four bilingual-PIP projects typify all six of the unfavorable factors:

- Management rather than instructional focus in the project.
- Whole-school, whole-day projects.
- General, flexible guidelines for operation.
- Dynamic, evolving practices.
- Requirements for exceptionally skilled staff.
- Conventional ideas applied unusually well.

To elaborate, many of the features that distinguished the original, exemplary projects involved project management. These features included staff organization and roles, project director's management style, staff selection and hiring guidelines, staff development, and relations with district administrators and non-project staff. While these are major factors distinguishing good programs from poor ones, such management features are not readily transportable, since they usually require changes to firmly established, LEA organizational and administrative structures.

The fact that the bilingual projects were whole-school, whole-day projects was also a negative factor from the perspective of a diffusion planner. While relatively autonomous, encapsulated projects (like the compensatory-education reading and math labs) can usually be implemented by volunteer personnel with very little change to the school as a whole,

the bilingual projects required a wide variety of changes on the parts of administrators, teachers, and students, many of whom had no desire to make the changes.

The instructional features of the projects were generally flexible in the developer sites. That is, the projects consisted basically of a well managed context in which each teacher could apply her or his professional skills. Such projects typically provide the teachers with (a) consulting support from the project director and other project consultants, (b) support from the other project teachers via regular staff meetings and workshops, (c) staff development via scheduled inservice and university credit programs, and (d) adequate instructional materials. In general, the teachers work within the constraints of the established local curriculum. When such a project is adopted in a different district with a different organization, curriculum, and staff, substantial adaptation is usually required and, in any case, the instruction received by the students may have little or no relation to that received in the developer site.

Such projects contrast sharply with projects based on highly structured, instructional approaches (e.g., programmed instruction or programmed teaching) in which adopter-site students experience much the same instruction as did the developer-site students. Furthermore, the flexible instructional guidelines of the management-centered projects were of only limited help to either the experienced or the inexperienced adopter sites, both of which were usually more interested in new instructional approaches than in management strategies.

The exemplary bilingual projects were in a state of dynamic evolution at the time that they were packaged. Thus, the projects, as packaged, were several years old by the time they reached adopters. Materials, and in some cases methods, were often viewed by adopters as out of date. The materials were a particular problem from a PIP-diffusion perspective, because adopter-site teachers often build their instruction around the available instructional materials, especially in the early stages of a

new program. Thus, they are most interested in the materials used by the exemplary sites. In the case of the exemplary bilingual projects, the developer sites selected the best they could find among currently available materials to supplement locally-mandated core texts. While the PIPs listed those materials, many were out of print or considered obsolete by the time the PIPs were available and, in any case, each adopting district had its own state or locally mandated texts. In the meantime, the developer sites had been free to replace the materials listed in the PIPs with newer editions or more attractive alternatives.

All four projects depended heavily on good bilingual teachers. This drastically reduced the number of potential adopters for which the projects were suitable, since an adequate supply of good bilingual teachers is not readily available in many LEAs. The lack of such teachers did not keep sites that lacked them from applying for PIPs, and some adapted admirably, using team teaching or bilingual aides to provide the required language skills. However, the need for this kind of adaptation reflected the fact that the projects, as packaged, did not meet the needs of these target LEAs.

As noted above, the projects were relatively minor variations on standard themes. Thus, while experienced sites may have found some good ideas, they should not have expected any major innovations. Sites with no bilingual-education experience could appropriately have expected basically sound advice, although comparable advice was available from a multitude of other sources. From a diffusion perspective, this meant that experienced sites found relatively little to adopt. The inexperienced sites found much to adopt but, given the many other sources of the information (TRCs, consultants, publications, other LEAs, universities, and so on), it did not appear that the PIPs represented a cost-effective addition to the pool of information sources.

7.3.4.4 Students. There were no major activities involving students during the preparation stage, either intended or actual.

7.3.5 Summary of Progress and Problems: Preparation

This section summarizes the major problems encountered during the preparation stage. This stage began with the AIR contract to select exemplary bilingual projects, and continued through the briefing in which USOE explained the diffusion task to the TRCs.

7.3.5.1 USOE. At the beginning of the preparation stage, USOE personnel (a) had a general goal of diffusing exemplary projects, (b) were in the process of developing the PIP concepts, and (c) had established an approach to identifying exemplary projects. Preparation consisted basically of identifying exemplary projects according to established procedures and packaging them in the PIP format, that is, of combining two available and complementary approaches. In retrospect, what was needed was to analyze the needs of target LEAs and the projects (or practices) available to meet those needs, and then to design a delivery system for bringing the practices and LEAs together. The result in the field test of the two combined approaches (i.e., project selection and PIP packaging) was that the projects were not well suited to target LEA needs and the delivery system was not well suited to the project-LEA combinations.

7.3.5.2 Diffusers. The TRCs were an existing diffusion and technical assistance system that was an obvious component for the experimental PIP delivery system. There were three problems, however, in the way in which the TRCs were used. First, they were given a diffusion plan that they had had no part in developing. Second, they were given only minimal orientation to the plan, and third, they were not given additional resources to support their PIP-diffusion activities. The results were that the TRCs did not have the skills and knowledge required for their roles, nor did they have the positive attitudes toward the PIP diffusion approach.

7.3.5.3 Target LEAs. The target LEAs varied widely in terms of decision-maker attitudes and potential-project-staff skills and attitudes. In principle, the diffusion system could have accommodated these differences either by providing for capacity building in sites that could benefit

from such efforts or by tailoring the diffusion system to a limited group of appropriate target LEAs. Instead, the pool of target LEAs was treated as relatively homogeneous, with the result that diffusion system was inappropriate to many of the target LEAs (including several of the field-test sites).

As noted under USOE, above, the PIPs and the projects (which fall under the LEA heading) were not appropriate to the needs and resources of the LEAs.

In short, the PIP-diffusion system was the result of an experimental attempt to meet USOE diffusion goals by combining an existing project-selection procedure, an existing packaging approach and an existing diffusion organization (the TRCs). With the advantage of hindsight, it is clear to us that this combination could not have met the USOE goals. In the terms of the PIP-diffusion-system model, the major system breakdowns had occurred by the end of the preparation stage.

7.4 Stage 2: Selection/Adoption

7.4.1 Overview

7.4.1.1 Definition of Stage 2. The selection/adoption stage begins with the first contact between the TRC diffusion personnel and the potential adopter sites. It continues through the commitment to adopt a specific project as indicated by the submission of a Title VII grant application.

7.4.1.2 Major features and problem areas. The dissemination plan, as presented to TRC representatives by USOE at the November 3 workshop, was as follows: Each TRC was to identify potential adopters through SEA records, OBE lists of previously unsuccessful Title VII applicants, personal knowledge, and any other available sources of information. Potential adopters were to be mailed an ASK, then telephoned at about the time the ASK arrived to explain the purpose of the ASK and the dissemination effort. A second phone call was to be scheduled about a week later to answer questions and determine the level of interest. A third call or a visit was to be made to interested districts for the purpose of initiating technical assistance in the preparation of grant applications. Project Orientation and Planning Materials were also to be sent to interested districts. Additional technical assistance was to be provided by TRCs in special PIP workshops or by expanding previously scheduled workshops to include PIPs. A log of ASK mailings, listing dates and LEA names, was due at OBE by 30 November. Title VII grant applications from candidate LEAs were to be due on 20 January.

Nominally, the dissemination effort proceeded much as planned, but there were three significant areas of departure: first, the variation in commitment and levels of effort among the TRCs; second, the slippage in the dissemination time schedule; and third, the intervention in the dissemination process by non-TRC (i.e., USOE and SEA) personnel. The attitudes of the TRC personnel are discussed under Preparation of Diffusers (7.3.3). Otherwise, these issues are discussed under Selection/

Adoption Activities Affecting Target LEAs (7.4.4). Other key selection/adoption problems and issues are indicated in Figure 11.

It should be noted that selection/adoption occurred during the winter of 1976-1977, while the RMC study began in late July of 1977. Thus, all activities described in this section have been reconstructed from files and interviews obtained by RMC a year or more after the events. However, although some information was undoubtedly lost due to the delay, we believe that omissions or inaccuracies, if any, are not of sufficient importance to affect the conclusions of the study.

7.4.2 Selection/Adoption Activities Affecting USOE

7.4.2.1 USOE personnel (feedback on selection/adoption progress).

While there was no formal "intended" model for activities affecting USOE during selection/adoption, it is implicit in the experimental nature of the field test that USOE personnel should be provided with feedback that would permit them to adjust USOE and diffuser plans where necessary to meet the study objectives. In fact, such feedback was obtained and used, as described below.

The main sources of feedback on the selection/adoption process were the TRC logs of LEA contacts, the direct communications with TRC personnel, and the LEA Title VII grant applications. From these three sources, USOE personnel were aware of the progress of the selection/adoption activities and, in particular, understood (a) that TRC dissemination schedules were slipping, (b) that very few LEAs were responding positively to the awareness activities, and (c) that subsequently (after additional LEA applicants had been recruited), some of the PIP projects were selected by fewer than four LEAs, the minimum number desired by USOE for purposes of the study.

7.4.2.2 Other resources: TRC logs and Title VII grant applications.

The major materials used by USOE in selection/adoption were the TRC logs and the Title VII grant applications. The TRC logs provided the information that they were intended to provide. The Title VII grant applications

Stage 2: Selection/Adoption (7.4)	
<u>USOE (7.4.2)</u>	
<u>Personnel (7.4.2.1)</u>	● Feedback on selection/adoption progress
<u>Other resources (7.4.2.2)</u>	● TRC logs and Title VII grant applications
<u>Plans and constraints (7.4.2.3)</u>	● Revised timetables and USOE participation
<u>Diffusers (7.4.3)</u>	
<u>Personnel (7.4.3.1)</u>	
<u>Other resources (7.4.3.2)</u>	
<u>Plans and constraints (7.4.3.3)</u>	
<u>Target LEAs (7.4.4)</u>	
<u>Personnel (7.4.4.1)</u>	● Initial screening of LEAs ● Informing versus convincing the LEAs ● TRC priorities and time schedules ● USOE and SEA dissemination activities ● LEA motivation to adopt via PIPs ● Grant applications, and USOE selection of field-test sites ● Outcomes of dissemination and selection processes
<u>Other resources (7.4.4.2)</u>	● The PIP image
<u>Plans and constraints (7.4.4.3)</u>	● Project selection
<u>Students (7.4.4.4)</u>	● Student selection

Figure 11. Actual PIP diffusion system: Stage 2 key issues.

were, in RMC's judgment, inadequate for the needs of a satisfactory selection/adoption process. Although, given the many other problems affecting the bilingual-PIP diffusion system, it is unlikely that improvements in the application forms would have had any noticeable effect on the diffusion-system outcomes, nevertheless these forms were the key components in USOE's LEA-selection process. The forms were clearly not designed with the idea of channeling appropriate, exemplary projects or practices to target LEAs, and the entire application process would need to be reconsidered in any systematic approach to planning a diffusion system.

7.4.2.3 Plans and constraints (revised timetables and USOE participation). Based on the available information, the plans for USOE non-participation in selection/adoption were changed, and USOE began to take an active role in recruiting applicants and in the project-selection process. USOE participation became a major (perhaps dominant) factor in the actual selection/adoption process as described under the LEA section (7.4.4), below. In addition, the time schedule was adjusted to provide the time needed for recruiting additional field-test sites.

7.4.3 Selection/Adoption Activities Affecting Diffusers

7.4.3.1 Diffusion personnel. The diffusion plans did not call for any further training of diffusion personnel during selection/adoption, and no formal training occurred. Of course, the TRCs received feedback from their dissemination activities, and knew that there was very little response from the target LEAs but, in general, they did not act on this information.

7.4.3.2 Other resources. No major development of materials for TRCs or changes in TRC facilities or funds were intended during the selection/adoption stage, and none occurred.

7.4.3.3 Plans and constraints. In general, no major changes in diffusion plans were made during selection/adoption. One notable exception occurred when an SEA arranged for one SEA disseminator together with

one TRC staff member to visit all target LEAs in the state. According to the TRC staff member, one adoption could be attributed to these visits.

7.4.4 Selection/Adoption Activities Affecting Target LEAs

7.4.4.1 LEA personnel. The basic objective of the intended selection/adoption dissemination activities was to obtain applications from target LEAs for appropriate PIPs. The basic approach was to provide information to LEA decision makers that would motivate them to apply. Thus, most of the selection/adoption activities fall under the general heading of informing and motivating LEA personnel. In describing the results, we distinguish between two sequential choices--first, the choice to adopt via a PIP and second, the choice among the four PIPs. A third process, selection of PIP recipients from among the applicants, was part of the intended PIP diffusion model but, due to the limited number of applications, all applicants that qualified for Title VII grants (all but one of the PIP applicants) were included in the PIP study.

Initial screening of LEAs. The methods of screening LEAs for initial contact varied substantially among TRCs. Some TRC disseminators screened out LEAs that had small numbers of potentially eligible students; others contacted all LEAs in their service area who did not have Title VII programs; others contacted only those LEAs with an expressed interest in applying for a Title VII grant, or those that had previously submitted unsuccessful Title VII applications.

Informing versus convincing the LEAs. The variations in TRC enthusiasm appeared to be a key factor in the relative numbers of adopters recruited by the different TRCs. Under the nominal system, the major diffusion activity was the dissemination of information. That is, LEAs were to be informed about the PIPs through the ASKs and the TRC phone calls. Based on this information, LEAs would then adopt PIP projects that met their needs based on their analysis of the information.

In fact, dissemination of information proved to be only one part of an effective diffusion strategy. Most LEA decision makers are deluged with such information from a multitude of sources and can process only a limited amount of it in any detail. To ensure that the appropriate decision makers in an LEA gave serious consideration to PIP adoption appeared to require an enthusiastic sales job by someone with substantial credibility.

The result in the bilingual-PIP dissemination was that, while all TRCs met their obligations to disseminate ASKs to potential adopters, only those that followed up very aggressively obtained more than an occasional expression of serious interest. Only seven or eight of the fifteen TRCs were associated with actual adoptions and, in some of these cases, factors other than the TRC efforts were largely responsible for the adoptions.

TRC priorities and time schedules. The PIP dissemination activities had to be accommodated in TRC schedules that were already full, and at least some of the TRC directors felt that their previously planned activities had greater potential for positive impact and required equal or higher priorities. While some of the TRC logs showed extensive mailings by mid-November, much of the mailing was done in December and some was carried on into January. The deadline for grant applications was extended accordingly until the end of February.

USOE and SEA dissemination activities. Another departure from the nominal dissemination plans involved the direct intervention of USOE and SEA personnel. This form of dissemination was generally not documented, but was mentioned so frequently by LEA and TRC personnel that it appears to have been a major factor in convincing the 19 PIP field-test sites to adopt. In the relevant cases, the personal encouragement of senior USOE or SEA personnel apparently provided the incentive to consider a PIP adoption seriously.

One SEA, which was actively attempting to increase the number of Title VII programs in the state, convened a Title VII proposal-writing conference in cooperation with a TRC. All interested LEAs in the state

were invited, and the PIPs were introduced at this meeting. LEAs that expressed interest were called back to another meeting at which an outside educational development contractor had been invited to participate. This contractor volunteered to write the Title VII proposals for LEAs with the expectation that, if funded, the LEAs would contract their staff development and project evaluation components to the contractor. Four of the six LEAs that applied for PIPs from this state accepted this arrangement. In total, the SEA-TRC-LEA interaction in this state contributed to six of the 19 PIP adoptions.

LEA motivation to adopt via PIPs. The LEA motivations to adopt were complex and, of course, involved more than the encouragement from USOE, SEA, or TRC advocates. All sites, for one reason or another, wanted a bilingual program. At least eleven of the sites had existing Title VII or state programs that they wished to upgrade or expand. Virtually all sites saw the PIP adoption as increasing their chances for Title VII funding, either because they felt the PIPs would help in the preparation of higher quality grant applications or because they believed that some preference would be shown to PIP adopters (although OBE guidelines stated explicitly that all applications would be judged solely on their merits, and no mention of the PIPs was to be made in the applications). At least three sites saw a PIP adoption as a means of complying with OCR regulations. Two sites emphasized their lack of experience and the hope that the PIP would provide the guidance they needed in establishing a program, while several others reported similar motivations in varying degrees. One site was favorably disposed toward the PIP concept because of their experience in having a local project packaged in the original compensatory-education-PIP study. Another was familiar with the Venceremos developer site and had a prior interest in adopting at least some of its features.

The PIP packaging concept had a moderately positive influence in some sites, but may actually have discouraged others. The idea of having all project guidelines pulled together in one package was attractive, but TRCs reported that the apparent restrictions imposed by the packages and the impositions of the field test created unfavorable reactions in some sites. The evidence of effectiveness and the JDRP approval were mentioned as

positive features by some sites but certainly were not a major factor in decisions to adopt, since few LEA decision makers seem to think in terms of transportable projects with associated transportable impacts.

The basic project features played a major role in determining the market for the PIPs. All the projects were for grades K through 4, all had similar staffing patterns, all specified starting with the first two grades and expanding upward one year at a time, and all were for similar student populations. None dealt with small groups of non-English students or with mixes of non-English languages (see Appendix C for a detailed comparison).

Grant applications, and USOE selection of field-test sites. With some exceptions, the LEAs had access to the complete PIPs in preparing their Title VII grant applications. The grant-application process is clearly a key factor in a diffusion system. That is, grants may be awarded to sites on the basis of LEA proposal-writing skills rather than on the basis of diffusion-system goals. This issue was not addressed in the bilingual PIP study, but available USOE records show only one PIP applicant for a Title VII grant that had its application rejected.

Personnel outcomes from dissemination and selection processes. The major "outcome" of the selection/adoption stage was the set of 19 field-test sites with their respective PIP projects. From the standpoint of the RMC study, the important diffusion-system results were largely determined at this point. Because of the nature of the PIP projects and the criteria used for selection, the assignment of the three Spanish-English projects to sites could be considered almost random in effect. The French-English sites, of course, had no choice. The degree of match between PIP projects and adopters is considered here for staff. Compatibility of instructional approaches, and student population matches are described under sections 7.4.4.3 and 7.4.4.4, below.

Staff availability was a major discrepancy in many sites. Only eight of the 19 sites were able to obtain a full staff of qualified bilingual

teachers as described in the PIPs, and three had none available at all. Since the PIP projects made no provisions for unqualified staff, substantial modifications were dictated in the relevant adopter-sites.

7.4.4.2 Other resources (the PIP image). No major selection or development of LEA "other resources" occurred during selection/adoption, but an outcome of PIP development, the image of the PIP from the perspective of the target LEAs, became an important factor at this stage. It is implicit among the concepts of the PIP diffusion system that the PIP itself will be viewed positively (or at least not negatively) by the target LEAs. In fact, as noted under Personnel (7.4.4.1), this was not always true. The bilingual-PIP field test confirmed the experience of the compensatory-education-PIP field tests that many educators react negatively to packaging, viewing it as an inflexible and simplistic approach to diffusion.

7.4.4.3 Plans and constraints (project selection). According to the conventions of the PIP diffusion model, the process of choosing a particular PIP is considered to be "selection of a plan" (for an LEA program). The intended process called for sites to analyze the project features as described in the ASK booklets and, with the assistance of the TRCs, choose the most appropriate project given the local goals and resources. This process broke down rather badly. First, as discussed above, the projects actually differed very little from the perspective of an adopter. Second, the USOE and TRC personnel had a rather superficial knowledge of the differences among the projects. Third, USOE was anxious to have at least four adopters for each project. Finally, the total number of applicants was small.

The net effect was that LEAs, with TRC guidance, chose largely on the basis of the developer-site student characteristics (primarily the ratio of LES to FES students in the schools) as described in the ASK, even though these factors were not reflected in the instructional features of the projects themselves. Subsequently, OBE Program Officers or TRC personnel required project changes in at least two of the 19 sites, either to make the

choices more appropriate in the OBE or TRC view, to fill out the field-test schedule, or both. The more critical implementation factors, such as availability of appropriate personnel, attitudes toward bilingual education, or agreement with specific instructional methods, applied equally to all the PIP projects, but played little role in the selection process.

Compatibility of the PIP-specified instructional approaches with LEA needs was largely a matter of perspective. Since the PIPs included very few specific instructional techniques, sites had a great deal of latitude with respect to which approaches could be considered compatible. This was helpful to many of the adopters, since they had ongoing practices or policies that they did not wish to change. In the few areas where specific approaches did differ among the PIPs, compatibility with LEA-desired approaches was low. Perhaps the major example was the team teaching approach, unique to Project Adelante. None of the Adelante adopters was interested in that feature of the project and none subsequently implemented it. By contrast, at least one Nuevos Horizontes adopter was already committed to team teaching, a feature not included in the Nuevos Horizontes project, and continued to use it after adopting the PIP project.

The impact of this breakdown in the selection process was relatively minor in the bilingual-PIP field test because of the similarities among the projects and the extent to which field-test sites adapted project features to meet local needs and resources. However, in RMC's judgment, an adequate selection process would be a key factor in any attempt to diffuse specific instructional or management practices without major adaptations.

7.4.4.4 Students (student selection). No processes actively affecting students were carried out during selection/adoption. However, the selection of sites is, in effect, the first step in selecting students. With the exception of Puerto Rico, the student populations in the Spanish-English sites were generally similar to those in the developer sites, that is, a wide mixture of proficiencies in both English and Spanish. Aside

from the unique situation in Puerto Rico, the only student-related discrepancies that created any real problems were the small numbers of eligible students in some adopter sites. In some of these sites, the projects were too small to support the PIP-specified management structure.

In the French-English sites, while project students were generally low in English proficiency, virtually none spoke more than a few isolated words of French. This substantially changed the complexion of the projects from that described in the PIP.

7.4.5 Summary of Progress and Problems: Selection/Adoption

In summary, to the extent that accurate replication of the developer-site projects was a goal of the PIP diffusion system, it is clear in retrospect that the system was well off course by the end of the selection/adoption stage. The amorphous nature of the projects themselves and the lack of match between projects and adopters precluded anything approaching replication in most sites, even in sites that made a sincere effort to replicate faithfully. Conversely, and again because of the general and conventional nature of the PIP projects, almost any bilingual project could be said to include many features of the projects described in the PIPs, and thus all field-test sites were able to claim some level of replication.

7.4.5.1 USOE. During selection/adoption USOE monitored the dissemination process and, when it was apparent that target LEAs were not responding, altered their plans and intervened directly to ensure an adequate number of field-test sites.

7.4.5.2 Diffusers. No major processes affecting the TRCs operated during selection/adoption. However, in a few cases, USOE and/or SEA personnel interacted with the TRCs, adding additional, TRC dissemination activities to the original dissemination plans.

7.4.5.3 Target LEAs. The intended selection/adoption processes did not operate as planned. Neither the projects, as packaged, nor the dissemination approaches were particularly attractive from an LEA perspective. Very few LEAs responded to the nominal awareness activities, and for the 19 sites that were eventually recruited, selection among the Spanish-English projects was essentially random.

7.5 Stage 3: Start-Up

7.5.1 Overview

7.5.1.1 Definition of Stage 3. Start-up is intended to cover all activities from the time an LEA submits its Title VII grant application until students arrive in the bilingual-project classrooms. In practice, start-up workshops and other preparations were not always finished by the time students arrived, but this overlap does not present any real difficulties for the process evaluation. The overlap may, of course, cause considerable difficulty to an adopter site.

7.5.1.2 Major features and problem areas. The intended start-up process, as described in the PIP materials, called for the following activities to take place in the spring before project began operation: (a) planning, (b) orientation of LEA personnel, parents and community, (c) hiring of teachers, (d) ordering of materials, and (e) staff training. The major training activity, a two-week preservice workshop for new project staff, was scheduled for August.

Delayed start-up. The OBE funding schedule originally called for LEA Title VII grants to be awarded by the end of April so that field-test sites could meet the intended start up schedule. The actual awards and delivery of PIPs occurred in July and August, too late to brief school personnel or hire teachers under the normal procedures in most LEAs. The cooperative review of PIP-suggested materials by project staff, and subsequent ordering in time for the start-up workshop, were also not possible. Preparation time for the workshop was brief, and consultants were often difficult to find on short notice. Some sites had proceeded to plan and make tentative staff assignments in the spring without formal notification of grant approval, but most were reluctant to expend much effort, and none could make firm commitments to staff or order materials. The net effect of the delayed start was that start-up activities, in effect, overlapped the entire first year of operation.

Lack of guidelines for permissible adaptations. The delayed start-up was a serious problem. At the time school started, many adopters were short of materials, staffs were not all in place (and were unavailable in some sites), and staff training was incomplete. However, there was an additional type of problem that was in many ways even more troublesome. This was the lack of clear guidelines as to how closely the adopters should be required to follow PIP specifications. This issue is discussed under LEA plans and constraints (7.5.4.3).

Variations in bilingual program experience. A third major factor in the start-up stage (and, subsequently, in operation) was the variation among field-test sites in their previous bilingual program experience. This variation was reflected in the LEA uses of the PIPs in overall planning, in selecting and training staff, and in selecting materials. Specific issues related to level of experience are indicated under the appropriate headings, below.

The major start-up problems and issues are listed in Figure 12. Start-up activities were concentrated under "developing or modifying program plans," and "orienting, selecting and training personnel."

7.5.2 Start-Up Activities Affecting USOE

7.5.2.1 USOE personnel (information on start-up problems). With the award of the LEA Title VII grants, the OBE program officers became the primary USOE contacts for the field-test sites. Four program officers were involved, each responsible for from four to seven PIP sites. However, each program officer was also responsible for a large number of regular Title VII grantees, in some cases fifty or more sites in total. This heavy case load precluded extensive monitoring or consulting and, in addition, limited OBE travel funds prevented frequent visits to the sites.

Within this context, the major processes affecting USOE personnel during start-up were related to obtaining information on the progress of the field test. To RMC's knowledge, no formal "intended" feedback

Stage 3: Start-Up (7.5)	
<u>USOE (7.5.2)</u>	
<u>Personnel (7.5.2.1)</u> • Information or start-up problems	
<u>Other resources (7.5.2.2)</u> • Travel funds	
<u>Plans and constraints (7.5.2.3)</u>	
<u>Diffusers (7.5.3)</u>	
No major activities affecting diffusers	
<u>LEAs (7.5.4)</u>	
<u>Personnel (7.5.4.1)</u> • Delayed start dates • Orientation • Hiring of staff • Preservice workshops • Incentives and competing influences	
<u>Other resources (7.5.4.2)</u> • Ordering of materials	
<u>Plans and constraints (7.5.4.3)</u> • Guidelines for adapting the PIP projects • Effects of prior bilingual-education experience on program planning • PIP-specified instructional objectives	
<u>Students (7.5.4.4)</u> • No major activities affecting students	

Figure 12. Actual PIP diffusion system: Stage 3 key issues.

procedures were developed, presumably on the assumption that normal OBE contacts via telephone and mail would be sufficient. However, the actual procedures included two meetings in August, both scheduled on relatively short notice and held in the Washington, D.C. area.

The first meeting was held between USOE (OBE and OPBE) and RMC in early August 1977, shortly after the award of the RMC study contract, to discuss plans for the field-test study. The second meeting was held at the end of August and included the field-test-site project directors and evaluators. Various topics were discussed, including the general status of start-up in the field-test sites.

As a result of these meetings and the additional phone and mail contacts with the sites, USOE was relatively well informed as to the status of start-up. The information available to USOE was that there was considerable confusion in the field-test sites due in part to the delay in grant awards, and in part to ambiguity as to exactly what USOE required of the sites (see 7.5.4.3). These problems were clearly adding to the normal difficulties of developing new programs and were symptomatic of the more general diffusion-system problems discussed under the preceding stages. However, while USOE was informed as to the problems, few remedies were available to USOE by this time.

7.5.2.2 Other resources (travel funds). No development of USOE materials or facilities was planned for start-up and none was needed. Lack of travel funds, however, was a problem. As start-up activities continued through the fall (overlapping with operation), restricted travel funds delayed program-officer site visits until November in many cases and thus delayed the resolution of many local issues.

7.5.2.3 Plans and constraints. No major adjustments to plans for USOE participation were intended and none occurred during start-up.

7.5.3 Start-Up Activities Affecting Diffusers

No major processes affecting diffusion personnel, other diffusion resources, or diffusion plans and constraints were intended or occurred during start-up. Diffusion personnel from TRCs were, however, involved in some LEA training and planning activities.

7.5.4 Start-Up Activities Affecting Target LEAs

7.5.4.1 LEA personnel. Personnel orientation, selection, and training were the major intended and actual LEA start-up activities. All were affected by the delayed start dates.

Delayed start dates. The intended sequence, as described in the PIPs, was for the project director (PD) to be hired by early spring. The PD would then orient all personnel (including principals, potential project staff, and parents and the community), recruit the project staff, order materials, and conduct a staff-training workshop, all before the beginning of classes in the fall. However, due to the delayed start, some sites did not actually start project implementation until after the beginning of classes. Six sites did not hire project directors until after classes had started. In fact, one of these sites did not begin project operations until two months into the school year; another site did not get underway until mid-year. At least five sites did not hire an instructional consultant prior to the start of classes. Of these, one was hired four months into the school year; two others were hired five and six months late. In summary, about one-third of all the PIP adopter sites did not hold project start-up workshops or get underway prior to the beginning of classes.

Orientation. The PIP recommended that the PD orient all LEA personnel, parents, and community to the goals and purposes of the project. Orientation of LEA personnel, parents, and community was a start-up activity that was only nominally done, in large part because of the delayed start-up. Some PDs made a presentation about their project at district-wide pre-service workshops; some LEAs also made some attempt to notify

parents of the project as part of their student selection activities during start-up. For the most part, the community as a whole was not informed about the project prior to operation, with the possible exception of a few sites where a local newspaper announced the award of the project grant to the LEA. Although reception of the programs was generally positive, there were some negative reactions in some sites that might have been reduced by additional orientation.

Hiring of staff. The PIPs recommended that the best teachers in the district be identified and that teachers were to volunteer for the project. For the most part, PIP adopters implemented the project with staff already available at the LEA. In most cases where the LEAs had had pre-existing projects, the teachers from these projects became the PIP-project teachers. In a few LEAs, some teachers were hired from outside the district to staff the project, but in no instance were all of the project teachers newly hired into the LEA. It is actually more appropriate to speak of teachers being selected and/or assigned to the project than to speak of hiring project teachers or of teachers volunteering.

Hiring of other project staff members generally followed PIP guidelines. Instructional coordinators were hired in most sites, as specified in the PIPs, as were bilingual aides. In fact, the nominal staff configuration was the one area in which the PIPs appeared to have a major impact although, of course, the aides are a common feature of most Title VII programs. Some sites did not follow the guidelines for community coordinators (either hiring where none was called for, or not hiring where one was specified in the PIP), and some sites adapted the duties of these personnel to meet local needs.

Preservice workshops. The preservice workshop was the mechanism intended to orient and train the new project staff, and get the project off the ground. It was scheduled for late August, and the PD was intended to have several months in which to prepare. The workshop was intended to be highly applied rather than theoretical, and to be focused on the specific tasks that would be required of teachers and aides during

the first few weeks of project operation. In short, the workshop was a key link in transferring the exact, exemplary procedures used in the developer site over to the staff of the new adopter site.

While all sites held some form of workshop, two factors drastically reduced the effectiveness of this transfer process. The first was the lack of preparation time available to the PDs. In at least one site, the workshop was held before the PIP arrived. Few sites had their PIPs for more than a week or two prior to their workshops, and none had the time to prepare as intended.

The second factor was the nature of the information contained in the bilingual-PIP workshop guide. As with other bilingual-PIP materials, the information and guidelines were rather general. The PIP described the topics to be covered, but not exactly how the workshop sessions should be conducted or what specific content to include. For many topics, the PIP guidelines were identical across the four PIPs. This approach, which was basically to provide for "staff development" in various areas of bilingual education, was consistent with the general nature of the project guidelines used in the developer sites, but not with the concept of diffusing specific, exemplary practices.

The result was that there was great variation in the workshops from site to site. Experienced PDs provided training sessions adapted from previous years. Among the inexperienced PDs, many relied heavily on outside consultants, most of whom presented their own approaches to bilingual education, and none of whom (to RMC's knowledge) made any real use of PIP guidelines. Experienced teachers and aides in sites with experienced PDs generally had positive attitudes and a clear idea of how to proceed with program operation, although there was little influence from the PIPs. In some of the less experienced sites, the PIPs had somewhat more impact, but, in general, the teachers and aides were not well prepared at the beginning of operation. Some were apprehensive and, in a few cases, even negative toward the programs.

Incentives and competing influences. Implicit in the above discussion and in the discussion of plans and constraints, below, is the issue of what motivated or influenced the field-test-site personnel to follow the PIP guidelines or to follow other guidelines. This study considered only the most obvious factors, but they are clearly critical to the success of a diffusion system.

The "intended" motivation to follow PIP guidelines was simply the validated, exemplary status of the projects. However, this and previous PIP field tests demonstrate that exemplary status carries little weight. The typical educator considers herself or himself as a professional who can best judge which approaches will suit local conditions. Most educators feel that each LEA context is unique. The concept of whole-project adoption is completely alien to most educators and is widely considered absurd.

At the same time, the typical educator receives a constant stream of ideas from colleagues, professional groups, commercial organizations, and so on. The educator considers these inputs within the context of the constraints from relevant laws, regulations, and policies, and then develops the best possible combination of program features, according to his or her professional judgment.

This description is intended only as a statement of the obvious, but it serves to illustrate a major problem in the PIP concept. That is, the local educator cannot be expected to follow PIP guidelines closely unless she or he can be convinced that this will lead to the best possible program (and we are aware of no way to do this), or unless strong incentives are provided such as strictly enforced regulations, or funding contingent upon careful replication of program features. The latter has been shown to work quite well in Study 2, the field-test of the prototype, compensatory-education PIPs.

7.5.4.2 Other resources (ordering of materials). The lack of facilities or funds during start-up, while affecting some field-test

sites, were not key problems from a diffusion standpoint. The ordering of materials, however, was. The PIP suggested that the project staff cooperatively review the PIP-recommended materials. Due to the late start, the review, selection, and ordering of project instructional materials was compressed into a very brief period. Sites that had a prior bilingual education project relied extensively on materials already available at the LEA. Other sites were influenced by neighboring LEAs, SEA recommendations or the preferences of their staff. About half of the sites did order some of the PIP-recommended materials. However, with only a few exceptions, most projects were unable to select and order new materials before the beginning of classes.

7.5.4.3 Plans and constraints. No major changes to plans or constraints were included among the intended start-up processes and outcomes. The need for extensive development of LEA program plans was presumably eliminated by the PIPs. Legal and other constraints on start-up activities were not considered in the PIP diffusion plans, and no provisions for modifying either the PIP plans or the constraints were included.

In fact, the actual start-up stage included major changes to the PIP plans to fit local needs and resources. In addition, state and local laws and regulations governing objectives, hiring policies, instructional materials, and so on often conflicted with PIP specifications, thus requiring further modification of the plans.

Guidelines for adapting the PIP projects. As noted above, the PIP projects did not lend themselves to ready identification of key features, so it was difficult to establish guidelines on permissible adaptations. While USOE wished to preserve the concept of replication as much as possible for the purposes of the field test, no one wanted to impose arbitrary requirements on the sites that would clearly hurt their chances for success.

Toward the end of August, a meeting was held by USOE in Silver Spring, Maryland for all adopter-site project directors and evaluators as well as for the RMC evaluation staff. At this meeting, the project directors were

urged to follow the PIPs closely but to adapt to local conditions "where necessary." Interpretation of this guideline varied widely, adding a considerable amount of noise to the RMC study, and resulting in confusion and negative attitudes on the parts of some project directors.

Effects of prior bilingual-education experience on program planning.

Eleven of the 19 field-test sites had had previous bilingual programs of some sort. Nine of these 11 sites had previously received state bilingual funds, four had received local funding, and four had received Title VII grants. Several of these sites had received funds from two of the three sources, and one site had received funds from all three. In addition, three of the 11 sites had Title I or Title I migrant programs offering services to limited-English-proficiency students.

Of the 11 sites with previous bilingual-education programs, four essentially replaced their programs with the PIP programs. The other seven sites extended services to more children and/or extended the number of hours per day that services were offered. Of the eight sites that had not had formal bilingual-education programs, at least four had implemented some form of services for limited-English-proficiency students and had this experience to draw upon. Only four of the 19 sites could be described as having new programs together with project directors who had little or no previous bilingual-education experience.

The impact of this previous experience on program planning was that none of the field-test sites viewed the lack of specific plans in the PIPs as catastrophic. Where the PIPs were incomplete or in conflict with regulations, the PDs simply adapted as necessary. In some cases, it would be more accurate to say that the PDs implemented bilingual programs using their own plans, adapting them as necessary to conform to PIP-specified staffing configurations or other salient features.

PIP-specified instructional objectives. In any attempt to transfer the exemplary characteristics from the developer to the adopter sites, the instructional objectives would appear to constitute an especially

important subset of the project plans. All four bilingual PIPs included instructional objectives from the developer sites and three of the PIPs included separate manuals on instructional objectives. In general, the instructions were to review the objectives and adapt them as necessary to fit local goals and curricula.

Virtually all sites attempted some review of the instructional objectives in the PIPs but, in general, they used the PIP objectives as inputs to supplement existing state or local objectives rather than adopting them as they stood. By and large, project staffs felt the PIP-specified objectives were not detailed enough, and several sites felt their preexisting objectives were better.

7.5.4.3 Students. In both intended and actual implementation, selection of students, a key process, may occur before the end of start-up. However, since student selection is a regular, yearly project activity, it is included in the PIP-diffusion model under "operation."

7.5.5 Summary of Progress and Problems: Start-Up

By the end of start-up, the major impacts of the PIPs were on staff configurations, materials, and development of instructional objectives. Most sites hired staff with the nominal titles given in the PIPs (i.e., instructional consultants, curriculum coordinators, and so on). All hired aides. Some sites ordered materials specified in the PIP lists, others reviewed the lists and chose to use materials on hand, or made up their own revised lists based on their past experience, while still others were influenced by outside sources to order quite different materials.

7.5.5.1 USOE. Although time and funding restrictions prevented OBE program officers from visiting most of the field-test sites during the early start-up stage, USOE was reasonably well informed as to the progress and problems in the sites. Other than this feedback, no key processes affecting USOE were intended or occurred during start-up.

7.5.5.2 Diffusers. No key processes affecting diffusers were scheduled for this stage, although some of the TRCs monitored the progress of the adoptions in their regions and were adequately informed as to when assistance was needed.

7.5.5.3 Target LEAs. The major processes operating during this stage affected the LEA personnel, other resources, and plans. The overriding factor that precluded the operation of these processes as intended was the delayed start date. The PIP called for the PD to begin start-up in early spring so that (a) orientation could be carried out and support obtained from the school, parents, and community, (b) staff could be hired, where needed, during the spring when they were available, (c) materials could be ordered in time for delivery before the August preservice workshop, (d) careful analysis of the PIP project could be completed and adaptations made, where needed, prior to the preservice workshop, and (e) careful preparation for the workshop could be made.

Instead, PIPs and Title VII grants were received in late July or early August, and none of the intended processes were possible. The results were predictable and, as discussed in the next section, resulted in considerable delay and confusion during the initial period of operation. However, it will also be seen that the resulting problems were temporary. In effect, most of the intended processes operated during the first year and, by the beginning of the second year, the impacts of the delay were minor. In short, the result of the delayed start-up was to make the first year of operation unnecessarily difficult. However, unlike many of the problems discussed under the previous stages, this delay would probably not be crippling to the long-term outcomes of a PIP diffusion system.

By contrast, the processes related to plans and constraints were major breakdowns in the PIP diffusion system. No provisions were included among the intended processes for dealing with the constraints of state and local laws, regulations, and policies. No incentives to follow PIP guidelines closely were provided, and field-test sites modified the PIP project plans (including instructional objectives) as necessary to fit

local conditions. In terms of developing effective local programs, many of these modifications were certainly desirable. From the perspective of the evaluation of the PIP diffusion system, the modifications reflected major system flaws.

7.6 Stage 4: Operation

7.6.1 Overview

7.6.1.1 Definition of Stage 4. The final stage in this analysis begins with the arrival of students in the project classrooms. Of course, this is only the beginning of continuing program development. However, for the purposes of analysis, the changes over the first two years can be collapsed, because the major considerations from a diffusion perspective are: (a) whether key features are implemented at all (on any reasonable time schedule), and (b) whether these features are retained in the adopter-site programs.

7.6.1.2 Major features and problem areas. The principal, "intended" characteristics of operation were that the adopter-site programs (a) would be implemented quickly and smoothly and (b) would duplicate the exemplary features of the developer site. The net effect of the delayed start-up was that projects were far from completely operational at the time operation began, and gradually completed the planning, hiring and training of staff, and ordering of materials as the year progressed. While life was hectic for project staff during the early months, most seemed to accept this rate of progress, and the long-term impacts of the late start were probably minimal in most sites. These problems were described under start-up, above.

The focus of this section is on the extent to which the developer-site procedures and outcomes, as described in the PIPs, were duplicated in the adopter-sites. The conclusion reached is that, while many sites established bilingual programs that meet current standards for desirable features, the influence of the PIPs (over and above Title VII and other available guidelines) was rather small. Project specifications from the four PIPs, as well as individual, field-test-site program descriptions, are summarized in Appendices C and A, respectively. This section summarizes the intended and actual program features and discusses the influences of the PIPs on the actual features. Following the conventions of

the diffusion model, the major areas considered fall under "personnel training processes and outcomes" (7.6.3.1), and "student selection and training; processes and outcomes" (7.6.3.4). The specific topics are listed in Figure 13.

7.6.2 Activities Affecting USOE During Operation

PIP-study impact on USOE plans for packaging. The major processes affecting USOE during operation involved feedback on the status of the field-test-site programs. These processes consisted primarily of normal USOE monitoring activities, with the addition of reports from the RMC studies. This feedback had relatively little impact on the field test, but has had a major impact on USOE plans for diffusion via PIPs. In particular, plans to proceed with further PIP development or PIP-based diffusion approaches have been dropped. The use of packaging, however, has been added to the NDN diffusion system and, while the NDN packages are tailored to NDN needs and thus differ from the PIPs, the NDN packaging guidelines have been influenced by the three PIP field tests.

7.6.3 Activities Affecting Diffusers During Operation

Some of the TRCs were involved in training field-test-site personnel during operation, but no major diffusion-system impacts on the TRCs were intended or occurred.

7.6.4 Activities Affecting Target LEAs During Operation

7.6.4.1 LEA personnel.

USOE and TRC inputs. USOE and the disseminators (TRCs) continued to be active during the operation stage. Some TRCs followed up preservice workshops with classroom observation and then designed inservice workshops accordingly, or participated actively in regularly scheduled training sessions. OBE program officers met with project directors at conferences, consulted by telephone on matters of compliance, and visited some adopter sites in the late winter and spring.

Stage 4: Operation (7.6)	
<u>USOE (7.6.2)</u>	● PIP-study ● Impact on USOE plans for packaging
<u>Diffusers (7.6.3)</u>	● No major, relevant impacts on TRCs
<u>Target LEAs (7.6.4)</u>	<u>Personnel (7.6.4.1)</u> ● USOE and TRC inputs ● Management style ● Staff configuration ● Staff skills ● Staff roles ● Staff development ● Parent and community knowledge and attitudes <u>Other resources (7.6.4.2)</u> ● Instructional materials ● Facilities and funds <u>Plans and constraints (7.6.4.3)</u> ● PIP versus other influences on program plans <u>Students (7.6.4.4)</u> ● Class configurations ● Student selection ● Instruction of students - Instructional objectives - Language of instruction - Instructional approaches

Figure 13. Actual PIP diffusion system: Stage 4 key issues.

In general, however, this technical support did not contribute greatly toward accurate replication of developer-site projects. The TRCs, by and large, did not use the PIPs in developing their technical assistance activities. The OBE program officers were concerned about replication but, due to the general level of description in the PIPs and the realities of local conditions, there was no easy way to deal with replication as a compliance issue. Then too, the program officers had heavy monitoring loads in addition to the PIP adopter sites, and were never in a position to provide intensive technical assistance.

Management style. The management style is a salient feature of exemplary programs, and the PIPs placed considerable emphasis on the intended style. However, the actual management styles in the adopter sites depended almost entirely upon the local project directors, and upon local policies. The major impact of the PIPs, as noted above, was in defining project staff positions, and the simple existence of the various support personnel, such as instructional coordinators, determined nominal lines of authority and affected delegation of authority to some extent.

All PDs attempted to maintain communication with the district office, parents, and the community, although again, it would be misleading to say that they replicated specific activities carried out by the developer sites.

Staff configuration. The PIPs specified a particular staff configuration and qualifications for the project staff. All projects nominally had a project director, teachers, and teacher aides. However, differences in staffing configurations appeared among the project's support staff. Two of the 19 projects matched the PIP-specified configuration for all their staff, while five of the 19 sites had support staff configurations that were mostly dissimilar from the PIP specifications. The remainder of the sites had some combination of PIP and non-PIP configurations.

Staff skills. In the area of staff qualifications, the adopter sites varied from the PIP-specified qualifications in substantial ways.

Thirteen of the project directors had no prior administrative experience, as required by the PIPs, although about 12 of the 19 project directors had prior experience in and knowledge of bilingual education. The instructional coordinator (IC) staff position required a person that was very knowledgeable in bilingual education. Ten of the ICs met this criterion.

The PIPs required all project teachers and aides to be bilingual. Nine of the 19 sites had complete staffs of bilingual teachers during the first year of implementation, but only five sites had all bilingual teachers during the second year as the project expanded into another grade. Fourteen of the adopter sites had all bilingual teacher aides the first year, but only ten sites had all bilingual aides the second year.

Staff roles. The PIPs specified particular roles for all of the designated project staff. With the possible exception of one site, the roles of the project support staffs were not completely congruent with the PIP specifications. It is clear from the site data that the local LEA practices and preferences, including the LEAs' prior experience in bilingual education and the LEAs' access to bilingual education training resources, were the major influences in shaping the roles of the projects' support staffs. Local conditions and policies often prevented adherence to PIP-specified roles for teachers and teacher aides, as well as support staff, although there was a greater degree of congruence in the cases of teacher and teacher aide roles.

All the PIPs specified that the teachers conduct bilingual classroom instruction. Because not all teachers in the adopter sites were bilingual, this specification was adapted. In the case of the French/English PIP sites, the project teachers conducted all English language instruction and the aides and/or French foreign associates, conducted all the French instruction. In Puerto Rico, the teacher conducted all instruction in Spanish and the aides conducted all English-language instruction. In one site that had many English-monolingual teachers, the aides conducted most of the Spanish-language instruction. In the remaining sites, the teachers

did conduct bilingual instruction, especially in kindergarten and first grade. By the end of the second grade, RMC observed that in most sites instruction in Spanish was largely limited to Spanish reading.

The PIPs specified various additional tasks for teachers, such as developing objectives, developing materials, and providing individualized objectives, but the exact list varied across the PIPs. For some sites, the existence of a PIP specification (e.g., grouping or individualization) provided the impetus for changes in the teachers' role and in classroom procedure. However, because all of the tasks are commonly assigned to teachers, many were already being done. Conversely, the absence of a task specification in one PIP did not mean that teachers in adopting sites did not engage in that task.

The role of the teacher aides is described slightly differently in each of the four PIPs. Only two of the PIPs specified that aides assist with classroom instruction. However, because the role of the aide is usually defined by individual school districts, aides in most sites assisted the teacher with instructional tasks in addition to tutoring, maintaining records, and preparing materials. Teacher aides in three of the 19 adopter sites were restricted to non-instructional roles by state law.

The aides in sites lacking bilingual teachers assumed additional instructional responsibilities as described above. In all of the sites, the roles of the aides depended more on local conditions than on the description in the particular PIP selected.

Staff development. The PIPs specified staff development as a central feature of the projects. Each PIP included a fairly detailed schedule for the teachers' preservice workshops and somewhat more general guidelines for subsequent inservice. However, even the few sites that covered all the topics listed in the PIPs had to depend on TRCs, universities, consultants, and their own staff to determine the actual content and substance of the training. The PIPs also specified that project staffs should develop performance objectives. In a number of sites, this task occupied most of the staff's in-service training time.

At other sites there was no apparent PIP influence on the staff development component. In any case, it was difficult to attribute the existence of a staff training component to the PIPs because during the first year of project implementation, Title VII regulations required that 15% of the total project budget be devoted to staff development.

Parent and community knowledge and attitudes. The PIPs all stressed the importance of communicating with the parents and community. Some called for community coordinators. Most sites made an effort to involve parents and to provide press releases for local newspapers. In general, parents were positive toward the programs, and only a few sites experienced negative reactions from either the parents or other members of the community.

The influence of the PIPs, however, was only moderate. Parent and community liaison is a fairly standard component of bilingual programs, and some sites hired coordinators even though they were not specified in their PIPs, while others did not have the funds for coordinators even though the position was specified in their PIPs.

7.6.4.2 Other resources.

Instructional materials. The intended process for obtaining instructional materials was to order the major items during start-up, then continue to order or develop supplementary materials as needed throughout the life of the program. The actual process included heavy use of existing materials in sites with previous bilingual programs and, for all sites, ordering and developing of new materials throughout operation.

Neither ordering nor developing of materials was tied closely to PIP specifications. Most sites used locally mandated core texts, and supplemented them as necessary with new materials. Sites without previous bilingual-program experience were more likely to look to the PIPs for suggestions, but some of the PIP-specified materials were no longer available from the publishers and, therefore, no adopter site could have adhered

strictly to PIP guidelines, even if the site had felt that it were desirable to do so. At least one site undertook an ambitious effort to develop instructional units for individualizing student programs, but it would be inaccurate to attribute this work directly to the PIP.

The net outcome was that, while all sites obtained and developed materials during the first two years and, in most cases, these materials were reasonably adequate for program needs, these materials differed substantially from those used in the developer sites at the time of validation. The field-test sites made the changes with the intention of improving their programs and, while RMC had no means other than the judgment of the site visitors to evaluate the impact of the changes, we have no reason to doubt that they were successful. However, these changes represented another major breakdown in the PIP diffusion system, since one of the key features affecting the students' day-to-day learning experiences had been changed from that used in the developer site.

Facilities and funds. Project facilities consisted of conventional classrooms in both the developer sites and the field-test sites. Funds were not available in some sites to cover all of the PIP-specified staff, and better coordination between project requirements and funding was clearly needed. One such area that was of particular relevance to the RMC study was the lack of adequate funds in some sites for program evaluators. This problem is addressed under the impact-evaluation substudy but properly belongs here, as well, since it was partially the result of lack of guidelines for the LEAs in preparing their Title VII grant applications.

7.6.4.3 Plans and constraints: PIP versus other influences on program plans. The intended program plans, as represented by the PIPs, continued to be modified throughout the two years of the field-test as the adopter sites made adjustments to fit local needs and resources. In most sites, the PIPs played a minor role in this process. Of much greater importance were state and local laws, regulations, and guidelines. Inputs were also obtained from the TRCs, university and other consultants, and neighboring

LEAs. The field-test sites found these inputs helpful, but they represented a departure from the intended PIP diffusion system.

7.6.4.4 Students. The major processes and outcomes of operation are those that affect students. In this section, these processes and outcomes are discussed under three headings: (a) class configurations, (b) student selection, and (c) instruction of students. As with the above sections, the emphasis of the discussion is on how closely the field-test-site programs matched those in the developer sites and the PIPs, and to what extent the PIPs influenced those results.

Class configurations. The PIPs specified that the projects should be installed in K-1 during the first year and then expand vertically one year at a time. Fifteen of the 19 adopter sites adhered to this guideline. Three of the remaining sites initially installed the program in additional grades as well. This decision was largely the result of a prior bilingual-education project in the LEA that encompassed more than just K-1. One site installed a project at the K level only. In the 15 sites that adhered to this guideline, the PIP specifications were probably major factors in the decisions.

The PIPs also specified a given number of classrooms per grade that should be installed initially and in subsequent years. Only five of the 19 sites adhered to this specification. Of the 14 sites that did not conform, two were slightly larger than recommended while the remaining 12 were smaller. Of these 12, about half were one-third to one-half the recommended size. For the most part, the size of the LEA appeared to be the factor that determined the actual size of the project.

Student selection. All four PIPs recommended procedures for selecting project students. However, these procedures were not practicable due to local policies and conditions, Title VII specifications, and Lau remedies. The actual procedures for selecting students did have long-term impacts on the programs. By and large, the selection was determined before the arrival of the PIPs, first by the selection of the field-test sites and, subsequently, by the local selection policies.

The characteristics of the project students do, of course, have a major impact on the kinds of instruction that are appropriate (and on project impacts on achievement), and should shape the program substantially. In particular, all of the Spanish-English sites included Spanish-dominant students especially in grades K and 1. However, in some sites many students were more proficient in English than in their native language. Thus, while the addition of the native language may have benefited these students greatly, it did not (at least in the short run) permit these students to deal with more difficult concepts in their math, science, social studies, and other non-language classes. Excluding Puerto Rico, this situation existed in 12 of the 14 Spanish-English adopter sites. A common situation among these Spanish-English sites was for students to speak some English and yet have low English-proficiency scores in language assessment tests. It was less common for students to be entirely non-English speaking (NES). The project students' performance on language assessment tests indicates a tendency for students to become increasingly more proficient in English as they progressed from K through second grade. As can be seen in Appendix D, these students often scored as well (or better) on English-language achievement tests as they did on Spanish-language versions of the tests.

Instruction of students. The following paragraphs summarize the degree of similarity between the field-test-site programs and the PIP specifications in the areas of instructional objectives, language of instruction, and general instructional approaches.

The PIPs specify the use of instructional objectives, and each PIP provides objectives of some sort. However, the PIPs state that teachers are expected to modify the objectives, so even a faithful replication would not result in use of the developer-site objectives. PIP directives allow the teachers a maximum amount of freedom in making daily instructional decisions (as compared, for example, to programmed instruction, in which teachers make relatively few decisions), thus making it unlikely that adopter-site instruction will duplicate developer-site instruction closely.

As noted under start-up, virtually all sites attempted some review of the instructional objectives in the PIPs but, in general, they used them as input to existing state or local objectives rather than adopting them as they stood. By and large, project staffs felt that the PIP-specified objectives were not detailed enough, and several sites felt their pre-existing objectives were better.

The PIP specifications on language of instruction state that instruction should begin in the students' dominant language and evolve towards the use of both languages (half English for Spanish PIPs, two-thirds English for the French PIP) by the end of first grade. However, no specific methodology is provided for second-language instruction, and, there is little information to guide teachers in critical decisions such as when students should begin reading in the second language.

Only four of the nineteen sites exhibited the exact pattern of language use called for in the PIPs. In the others, the differences were due to the teachers' language skills, the students' skills, numbers of LESA students, and the district's long-range goals. Some Spanish/English sites provided reading and content-area instruction in Spanish, with plans to use English for instruction in these areas when the students become more proficient in oral English. This occurred generally at ten of the sites. The other Spanish/English sites, whose students were more proficient in English or whose instructional staff were less prepared to teach in Spanish, provided instruction in both English and Spanish, in reading and content areas, from the very beginning. In the French sites and in Puerto Rico, instruction in French and English, respectively, was second-language instruction, since students did not come to school equipped to learn in those languages. However, the French sites and Puerto Rico effectively incorporated second-language instruction with the regular study of content areas.

Teaching techniques, content of instruction, and instructional approaches in general were generally conventional in terms of local practices except in sites where the use of two languages constituted a change. Few

sites could be described as utilizing highly individualized instruction, although most attempted to do at least a conventional type of grouping. Team teaching was used in at least three sites, but not in any of the sites adopting Adelante, the only project for which team teaching was described in the PIP as a core feature.

7.6.5 Summary of Progress and Problems: Operation

During the operation stage, all field-test sites established bilingual projects, most of which reflected the current state-of-the-art in bilingual education. However, the PIP diffusion system had had a relatively minor impact on the specific learning situations experienced by the students.

7.6.5.1 USOE. The information gained during operation effected USOE diffusion plans. In particular, it contributed to the decision not to extend the PIP diffusion approach to additional projects, and not to revise the bilingual PIPs.

7.6.5.2 Diffusers. No major, relevant impacts on diffusers occurred during operation.

7.6.5.3 Target LEAs. The field-test sites were affected in many ways during operation, but only marginally by the PIPs. The most obvious impact of the PIPs on LEA personnel was in the nominal staff configurations. Management style and staff development were influenced primarily by local factors, as were parent/community components.

Instructional materials reflected the PIP recommendations in some field-test sites, but most sites adapted the materials lists substantially to suit availability and local preferences.

Program plans, as represented by the PIPs, were also adapted extensively to meet local needs and to conform to local constraints and resources.

Instruction of students included the use of two languages and other features common to bilingual programs, but could not be said to duplicate the learning situations from the developer sites.

7.7 Summary of Project-Model Comparisons

Section 5.3.1 described the four major types of project models used in the analyses (i.e., developer-site projects, PIP projects, adopter-site initial conditions, and adopter-site operation) and listed six of the comparisons among the models that, in combination, provide an overview of the diffusion-system impact (Figure 8). These comparisons have been discussed implicitly in the preceding sections and are restated explicitly below.

7.7.1 Developer-Site Projects versus PIP-Described Projects

The PIPs accurately reflected the rather general instructional approaches of the developer sites but omitted many details, some of which would have been useful to the field-test sites.

7.7.2 Developer-Site Projects versus Field-Test-Site Initial Conditions

The developer-site projects obviously represented a difference from the initial conditions in field-test sites that had no previous bilingual programs. However, the developer-site projects were probably not significantly different from those that were operating in many of the experienced field-test sites prior to the PIP diffusion effort.

7.7.3 Developer-Site Projects versus Field-Test-Site Operations

At a general level, many similarities run through Title VII projects, and at that level, the projects established in field-test-sites could be said to be similar to the developer-site projects. However, it would be misleading to say that the field-test sites had replicated specific, developer-site projects.

7.7.4 PIP-Described Projects versus Field-Test-Site Initial Conditions

As with comparison 7.7.2, the PIP projects represented a difference from practices in inexperienced field-test sites, but relatively few major differences when compared to experienced sites.

7.7.5 PIP-Described Projects versus Field-Test-Site Operation

As with comparison 7.7.3, the projects established in the field-test-sites were generally consistent with PIP specifications, but it would be misleading to say that they had replicated the PIP-described projects.

7.7.6 Tryout-Site Initial Conditions versus Tryout-Site Operation

The installation of the PIP Title VII Projects represented a major change for the field-test sites that had not had bilingual programs in the past. For the experienced sites, there were changes in size, scope of services, and staffing patterns, some of which were directly influenced by the PIPs. However, changes in instructional approaches, to the extent that they occurred, were probably more often due to the availability of additional staff and funds than to specific PIP guidelines.

7.7.7 Within-Cell Project-Model Comparisons

In addition to the six major comparisons summarized above, the comparisons within the four cells in Figure 8 provide insights into the factors affecting the impacts of the PIP diffusion system. These comparisons are summarized below.

7.7.7.1 Comparisons among the four developer-site projects. A systematic comparison among the four developer-site projects was beyond the scope of this study. However, the information available to RMC suggests that, while no two of the projects were alike, they represented four different applications of the same basic bilingual approaches, with differences resulting largely from the local contexts in which they were implemented.

7.7.7.2 Comparisons among the four projects as described in the PIPs. A detailed analysis of the similarities and differences among the four PIP projects can be found in Appendix C. This comparison shows that while there are many specific differences among the PIP projects, most appear

to be arbitrary. There is little reason to choose one PIP over another, and the optimal solution might be to combine the ideas from all four packages.

7.7.7.3 Comparisons among initial conditions in the 19 field-test sites. It has been noted repeatedly in this report that the 19 field-test sites differed greatly in terms of experience and resources. Those factors appeared to be much more important than were the PIPs in determining the ultimate characteristics of the programs.

7.7.7.4 Comparisons among the 19 field-test sites at the operation stage. The ultimate criteria of PIP-diffusion-system success are related to the program features that are implemented in the adopter sites. In the case of the bilingual-PIP field-test, there was a wide range of features among the programs implemented in the field-test sites and, while all programs reflected the general PIP and Title VII guidelines, the similarities within a set of sites using a single PIP were no greater than those among the entire group of 19 field-test sites. That is, one could not identify which of the four PIPs had been used by observing the features of a field-test-site program (except, of course, that the use of French rather than Spanish identified the Savoir PIP).

8. DISCUSSION AND RECOMMENDATIONS

8.1 Discussion of Key Diffusion Problems

The above narrative summarizes the diffusion processes and outcomes broken down by stages of diffusion. This section discusses the problems in the diffusion system that run across components and stages. In this discussion, problems are organized by:

- The goals of the diffusion systems.
- The projects available for diffusion.
- The target audience for the projects as represented by the field-test sites.
- The delivery system for bringing the projects and sites together.
- The incentives for sites to adopt.
- The competing influences (working against replication) from other groups or systems.

8.1.1 Diffusion-System Goals

In considering the problems with the PIP diffusion system, it should be reiterated that problems exist only in relation to the goals of the system planners or the other groups involved in the system. That is, describing a result as a "problem" implies that something did not happen in the way someone wanted it to. The goals of the field-test diffusion system varied among the persons involved, and most of these goals were never formulated explicitly. In general, LEA goals were to obtain funds and technical assistance for their programs, and these goals were met to varying degrees. TAC goals were to comply with OBE requirements to disseminate PIPs, and these goals were also met.

In the case of USOE, the goals, as interpreted by RMC, were more complex. For the purposes of this discussion, USOE goals can be considered under two main headings:

1. Service (helping sites establish bilingual programs) including:
 - a. Responding to LEA-expressed needs for technical assistance
 - b. Diffusing specific, exemplary practices
2. Research (determining the transportability of the projects and the extent to which the projects lead to positive outcomes on students and others)

Overall, Goals 1a and 2 were met to varying degrees, and the questions as to how well they were met, or whether they could have been met better for the same cost are purely quantitative ones. Goal 1b, however, requires accurate replication of projects and was not met in the field test. In fact, as described in the preceding section, the possibility of replication had already been precluded by the end of the selection/adoption stage.

The ultimate conclusion was that the failure to meet the diffusion goal was due, in part, to the fact that this goal is not appropriate except under very limited conditions. In the case of bilingual programs, this goal would, at best, be appropriate only for the diffusion of specific, highly structured and relatively simple instructional or management practices. Given the current state of the art, the diffusion of complete, bilingual (or other) projects involving a complex of interrelated instructional, management, and staff development components is unrealistic.

8.1.2 PIP Projects

The projects chosen to meet the needs of the target LEAs presented major problems from all perspectives. There were very few real differences among the packaged projects, so the following comments apply to all: (a) All four projects depended heavily on good bilingual teachers. This drastically reduced the number of potential adopters for which the projects were suitable (although it did not keep sites that lacked such teachers from applying for PIPs). (b) The projects were relatively minor variations on standard themes. Thus, while experienced sites might have found some good ideas, they should not have expected any major innovations. Sites with no bilingual education experience could appropriately have expected basically sound advice, although comparable advice was widely available elsewhere. (c) Much of what was described in the PIPs involved project management. While this is a major factor distinguishing good projects from poor ones, many management features are not readily transportable, since they require changes to firmly established organizational and administrative structures. (d) Instructional features of the projects were generally not defined in enough detail to be of much help to either experienced or inexperienced sites. (e) The projects, as packaged, were several years old by the time they reached adopters. Materials, and in some cases methods, were often viewed by adopters as out-of-date.

Some packaged parts of the projects were seen as useful by project directors and teachers, but this depended largely on the level of expertise and experience of the personnel rather than on the PIP content. The less experienced project directors and teachers used the time schedules (calendars), suggestions for in-service topics, performance objectives, and so on. Those with more experience used the descriptions of these features as checklists, but typically implemented their own approaches.

In summary, as part of a general attempt to help LEAs, the projects provided at least some useful ideas for most of the field-test sites, especially those that were just getting started. However, they address the real needs of only a limited subset of Title VII target LEAs. For a

goal of precise replication, the projects were unsuitable. They required staff resources that were not always available and they did not provide adequate guidance for implementing instructional features.

8.1.3 Target LEAs

Logically, the place to begin in designing any diffusion system is with the educational needs of the target-LEA students, and with the objectives, available resources, and other relevant characteristics of the target LEAs. A major, additional consideration in a diffusion system is the size of the target audience for a particular set of projects or practices. These LEA-related factors are discussed below.

8.1.3.1 Student needs. Student characteristics (and consequently student needs) varied widely from site to site and also within each site. Language skills ranged from extremely limited proficiency up to native proficiency in both languages. Some students were clearly dominant in one language, a few highly proficient in both languages, and still others lacking adequate proficiency for academic purposes in either language. Scores on standardized reading and math tests ranged from well below to well above average. In general, the PIPs did not provide adequate guidelines for dealing with this wide range of students.

8.1.3.2 LEA adoption objectives. It is not safe to assume that all LEAs are interested in making changes, and even those LEAs actively seeking change may not want to install completely new programs. Many of the LEAs involved in the three PIP field tests were more interested in refining existing instructional practices, or providing more effective management structures for loosely organized programs. Many were also motivated, in part, by the federal funds or technical assistance associated with the projects being disseminated. For such LEAs, it is important that the available projects or practices fit in with existing instructional and management approaches. Even those LEAs that wished to add completely new programs (or replace existing ones) were seldom willing to consider major changes to district-wide practices.

8.1.3.3 LEA resources. Resources required for the adoption of new projects may include personnel, materials, and facilities. Staff skills and attitudes are perhaps the most important LEA resources required by the bilingual PIP projects, and at least half of the sites could not obtain teachers with the skills and attitudes specified in the PIPs. Thus, these sites could not accurately implement either the PIP projects, or any other projects requiring a full staff of skilled, bilingual teachers. Instead, these sites needed projects designed for the personnel that were available. In the short run, this usually meant monolingual English-speaking teachers with bilingual aides. In many LEAs, a long-term program of staff development was indicated.

8.1.3.4 Other relevant LEA characteristics. Organizational and administrative structures in the LEAs were also key features from a diffusion standpoint, and they proved highly resistant to change. Most administrative procedures, including staff hiring policies and management of federal projects, were applied uniformly within a given LEA, and exceptions were not normally made for single projects. This precluded implementation of many PIP-project features related to these procedures.

In addition, the attitudes of key administrators are critical diffusion-system considerations. Attitudes toward bilingual education and whole-project adoption varied widely in the bilingual-PIP field test. In at least some sites, there were no enthusiastic PIP-project supporters in the administrations, and the PIP project directors had to fight an uphill battle. The overall implication is that new projects must fit the attitudes and existing organizational structures unless long-term educational and capacity-building components are included in the diffusion system. A PIP-type diffusion system does not appear to be a feasible mechanism for changing these structures and attitudes.

The community contexts can be important factors, but in the PIP field tests they have been generally appropriate for the PIP projects. Often, principals in the bilingual PIP sites reported active interest from the community, and some told of parents calling to find out how to get their children into the programs.

A final key LEA characteristic, from a diffusion perspective, is the extent to which LEAs seek out information. Among the LEAs with needs for bilingual programs, many of those that actively seek out information already have programs in place. LEAs that have only rudimentary bilingual programs or none at all tend to be those that are not seeking information about new programs. Thus, a much more aggressive form of awareness activity is needed to reach this important part of the target audience than was provided in the bilingual-PIP field test.

8.1.3.5 Size of the target audience. An additional diffusion problem concerns the size of the target audience, that is, the number of target LEAs for a given project or practice. In the bilingual-PIP field test, the audience was broken into two groups--those LEAs with French-speaking students, and those with Spanish-speaking students. While the number of Spanish-speaking students in the U.S. is large, it appears that the number of LEAs with students from French-speaking backgrounds is relatively small. Thus, while elaborate, PIP-type materials might be justified for Spanish projects, the PIPs could not be considered cost effective in the smaller market for French projects. A target audience of this size would suggest a quite different diffusion approach, probably involving less elaborate materials and a correspondingly increased level of technical assistance.

8.1.4 Delivery System

The delivery system that was intended to bring the projects to the target LEAs consisted of the PIPs and related awareness materials plus the TRC and USOE personnel participating in the dissemination effort. Given the set of projects and target LEAs, it seems unlikely that any changes in the delivery system could have resulted in large numbers of faithful replications, but the study suggests that several features of the system would have produced problems even if the projects and target LEAs had been highly compatible.

8.1.4.1 PIP materials. The materials, including the awareness booklets as well as the PIP manuals, were not particularly well matched to the

TRC dissemination activities or the incentives provided by the system. Both kinds of materials were patterned after the original compensatory-education PIP materials that were intended to be as self-explanatory as possible in a system that provided strong incentives to replicate faithfully. In the bilingual dissemination system, where technical assistance was available, materials might better have been designed for use in workshops or as reference materials to be used after completing the workshops. Under these conditions, the materials could have been simplified and shortened somewhat, leaving the presenter to tailor the workshops to the needs of the audience.

With the lack of incentives to follow the PIPs exactly, and the impossibility of doing so in many cases, much of the existing PIP material was largely unused. Project directors reported that they liked the idea of having all project guidelines conveniently packaged, but some felt that the partial redundancy among the manuals made the PIPs inefficient for them to use, since they had to read much repetitious material in order to locate the information unique to each manual. Few project directors referred to the PIPs extensively after the projects got under way.

8.1.4.2 Diffusion personnel. The major processes carried out by the personnel in the delivery system were dissemination of information and, in some cases, provision of technical assistance. In retrospect, there were three required functions that were implicit in the field-test diffusion system: (a) promotion of the adoption concept, (b) assistance in selecting an appropriate project, and (c) provision of staff training to LEAs. Promotion or selling of the PIPs required enthusiasm and credibility as well as the resources and training to reach target LEAs. Most of the TRCs fell short of the ideal in terms of resources and training, and some clearly lacked enthusiasm.

Providing assistance in selecting a project required an in-depth knowledge of the projects and how they could be adapted to local conditions. Neither the TRCs nor anyone else in the diffusion system had this knowledge, nor did the PIP awareness materials contain enough information

to substitute adequately for highly-trained disseminators. At least four sites reported that OBE or a TRC had substituted or attempted to substitute a different project for the one requested by the site. While it appears to RMC that the sites, as well as OBE and the TRCs, were basing their selection decisions on superficial project characteristics, a considerable amount of confusion and frustration was generated by the substitutions. Provision of preservice and inservice training was also affected by the TRCs' lack of specific knowledge of the PIP projects, although many LEAs reported good training services, reflecting the general experience of TRCs in bilingual education.

8.1.5 Incentives to Replicate

Incentives are another key factor in the diffusion system. It is very clear from this and previous PIP studies that LEAs will neither study packaged information carefully nor apply the guidelines faithfully unless they have strong incentives to follow the guidelines to the letter (and we would add, quite rightly so). To date, the only incentive that has been shown to work is the provision of funds contingent on replication. Given the characteristics of the existing projects available for diffusion, this study illustrates that such incentives are not warranted and, in any case, current USOE policy precludes this possibility. However, it is the finding of this and other PIP studies (Campeau, Binkley, Hawkridge, & Treadway, 1978; Stearns 1975 and 1977) that without strong incentives, project directors will not implement features that do not appeal to them, no matter what claims are made of project effectiveness.

8.1.6 Competing Influences

The above discussions have dealt with the PIP diffusion system as if it operated independently of the rest of the world. In fact, of course, the LEAs were influenced by many other sources, some of which were much more compelling than the USOE PIP diffusion effort. Local policies are often the most compelling factors, and examples of local policies taking priority were common among the 19 field-test sites. A typical case was

a district that had previously tried team teaching and had abandoned it. PIP specifications calling for team teaching were simply ignored. In general, the study illustrated that a single, Title VII project cannot be expected to disrupt established, district policies or procedures.

Many states are heavily involved in developing bilingual education, and at least two SEAs became major factors in obtaining PIP adopter sites. However, where state regulations conflicted with PIP specifications, the state regulations received higher priority. Specific examples included use of SEA-developed objectives and SEA-recommended materials instead of those specified in the PIPs.

Commercial and professional organizations are also actively disseminating materials and teaching techniques, as are universities and teachers' colleges. Many of the adopter sites turned to these sources for help, and their projects were influenced at least as much by them as by the PIPs. Neighboring LEAs also disseminate their projects and have many advantages over a packaged description of a remote project. In at least three of the 19 sites, it would be accurate to say that they had adopted the project of a nearby district rather than that of the PIP developer site.

Finally, Title VII regulations require all Title VII sites to install most of the components of the PIP projects, and these regulations certainly affected staff development, community liaison, parent involvement, and evaluation components in the adopter sites. While there were no major conflicts between PIP specifications and Title VII regulations, it is clear that, if conflicts had existed, the Title VII regulations would have had priority over the PIPs. Considered from a different perspective, the impact of the PIPs, over and above that of the Title VII regulations, appeared to be minimal.

8.2 Answers to the Specific, Working Questions from Section 4.2

The general Substudy I question was--"What was the diffusion effort on LEAs?" The answer was that, in general, the diffusion effort was not very effective in getting target LEAs to implement the major, identifiable features of the developer-site projects. The specific questions are addressed below.

8.2.1 Adoption

8.2.1.1 What influenced potential adopter sites to adopt or not to adopt? The field-test sites were influenced to adopt by a felt need to install bilingual projects, by the belief that a PIP adoption would improve their projects and increase chances for funding, and by the personal encouragement of USOE and TRC personnel. Presumably, some target LEAs chose not to adopt via PIPs because they did not like either the projects, the package/replication concepts, or the field-test impositions. It seems likely, however, that many more target LEAs made no active decision on adopting. They simply never considered the question seriously at all.

8.2.1.2 To what extent were the projects chosen by the adopters appropriate to those adopters? The projects chosen by adopters were not highly appropriate to the specific adopter-site needs and resources, but, in about half of the sites, they were not highly inappropriate either. By inappropriate adoptions, we mean those where student needs were very different from those in the developer sites, where the LEAs could not supply the required staff, or where the sites lacked commitment to bilingual education. For the other sites, the projects were excessively management oriented and lacked instructional detail, but were general enough that they were not really unsuitable.

The matching of projects to adopters, based largely on the superficial feature of developer-site student characteristics, was for all practical purposes random. That is, while several sites reported choosing a project that nominally matched their student population (e.g., half limited English

and half fluent English), the PIPs contained very little information relevant to dealing with their particular student ratios.

8.2.2 Implementation

8.2.2.1 What factors (context, PIP, and other) influenced implementation? Implementation was heavily influenced by local conditions and other non-PIP sources. The major impact of the PIPs was on staffing patterns, (e.g., hiring of curriculum coordinators, community liaison persons, and so on) and, in some sites, on the instructional materials. All installed some form of staff development, parent involvement, and evaluation, as called for in the PIPs, but Title VII regulations were probably more influential than the PIPs in these areas.

8.2.2.2 What were the characteristics of the resulting programs and how closely did they resemble those described in the PIPs? The resulting projects varied widely depending on project director's style, availability of staff, and other local factors. Aside from staff qualifications, most of the sites resembled all four of the rather amorphous PIP projects at some level of detail. However, on the few tangible, distinguishing features (e.g., team teaching), there was little or no match between PIP projects and adopter-site projects.

8.3 PIP Revisions Versus Alternative Substudy I Products

Objective four of the bilingual-PIP diffusion study called for revision of the PIP materials on the basis of user input and problems identified during the course of the study. Funding for PIP revisions was, however, optional pending the results of the first year of the study. Given the above answers to the process evaluation questions, most of which were available by the end of the first year of the study, it was clear that a straightforward revision of the existing materials was not warranted.

At the same time, there was a general consensus among RMC, OPBE, and OBE that there was a considerable amount of information on bilingual projects and practices available from the study, and that some of this information could contribute to federal and/or local efforts to improve bilingual education. The two basic questions were: "Exactly which information should RMC proceed to develop?" and "In what formats should the various types of information be produced?" Before making decisions on these questions, it was decided to seek inputs from the potential users of the system and from the advisory panel for the study.

8.3.1 PIP Revision

8.3.1.1 Inputs from potential users. On the fifth of October, 1978, four members of the RMC bilingual-PIP staff met in Washington, D.C. with representatives from OPBE, OBE, the TRCs, the MDCs, the DACs, and the field-test LEAs to discuss the kinds of bilingual-project information that RMC should develop into user-oriented products. For the purposes of the discussion, RMC had organized the available information into five categories:

- project management guidelines
- instructional approach guidelines
- instructional materials guidelines
- project evaluation guidelines
- grant application guidelines

In the discussion, RMC emphasized that, while all are important, some were more appropriate to address under the current contract than others. In principle, "project management" appeared to be a particularly appropriate area. First, it is an area that seems to distinguish good projects from less effective ones. Second, it is the area most emphasized in the PIPs. Third, it is an area where LEAs are lacking experience, and fourth, relatively little information or help is available to LEAs in this area.

"Instructional approach" is also an area in which LEAs need help, but it appeared to be less appropriate for inclusion in an RMC study product. First, there is relatively little specific information in the PIPs on instruction, and what there is does not reflect developments of the last five years. Second, the TRCs and other agencies provide training in this area and, at least in theory, are better able to provide the most current information, an important consideration in a rapidly evolving area such as bilingual education.

"Instructional materials," for use in the classroom have never been included in PIPs, except for those materials developed by the originating site. Information about commercial materials and how to order them has been included in all PIPs, but we now believe that this is not a useful practice. Materials change so rapidly that information about them must be constantly updated. This would require a major effort by a permanent organization (e.g., the National Clearinghouse for Bilingual Education).

"Project evaluation" may be the area in which the information available at both the federal and local levels is most inadequate. In fact, both the bilingual program regulations and most locally designed evaluations are based largely on inapplicable principles and inaccurate assumptions. However, while it is possible to describe the problems with current approaches and to provide guidelines for doing the best evaluations permitted by the current state of the art, we cannot really solve the evaluation problems that USOE and the LEAs have experienced. The need is for simple, accurate evaluations. The best that can be offered is "ball-park" evaluation at a cost of considerable effort.

The final area, that of "grant application" information, is one of particular interest in a diffusion system. It is clear that in Title VII, as well as in other programs, grants tend to go to LEAs with good proposal-writing capabilities. If the emphasis of Title VII is to continue to move toward service (as opposed to a demonstration orientation), then one of the most critical diffusion stages is the selection of LEAs with appropriate needs. Presumably, the proposal writing process should be designed to identify such sites rather than to serve as a competitive, elimination contest.

In the October meeting, the USOE and field representatives recommended that RMC consider products in the areas of project management and evaluation. They also emphatically concurred that instruction and instructional materials should be left to the appropriate OBE centers. They were equally emphatic in their feeling that the area of grant applications should be outside the scope of RMC concerns.

8.3.1.2 Advisory panel recommendations. On the second and third of November, 1978, the RMC advisory panel, composed of experts in the fields of bilingual education, dissemination, and evaluation, met in San Jose to review the findings of the first year of the Bilingual PIP evaluation. RMC recommendations for PIP revisions and potential study products were among the topics discussed. (See Appendix B.)

From the beginning, the panel adopted a broad perspective on the needs of bilingual educators for packaged materials. In particular, rather than focusing narrowly on the question of what might be done to improve the existing PIPs, they ask the more general question of what kinds of materials would be most useful in establishing bilingual programs. While this approach was of their own choosing, it was entirely consistent with the position that RMC has taken in this report. That is, diffusion-system requirements should determine the kinds of materials to be developed, not vice versa.

The panel made many useful suggestions, and focused on three issues of special interest. First, the so-called "super-PIP" format was popular.

This type of package would provide information pooled from many exemplary projects in contrast to the existing PIPs which consist of a distinct package for each project. Second, it was suggested that the package should not be language specific, that is, that it should present sound principles of bilingual education that could be applied to many different language groups. Third, the panel encouraged the development of additional, high quality materials in the area of instructional approaches and techniques. They also supported the development of practicable evaluation guidelines.

The RMC staff concurred with the position of the panel and felt that, in terms of RMC study constraints, the implications were clear. The panel was saying, in effect, that a revision of the existing PIPs would not be sufficient to bring the packages into line with real needs. However, JDRP policies and RMC contract limitations precluded the development of new guidelines for bilingual programs. Thus, most of the kinds of materials that would be needed to meet the needs would be outside of the scope of this study.

8.3.1.3 Conclusions concerning PIP revisions. Based on the experience of this study, the experience gained from other PIP studies, and the insights gained from the two meetings discussed above, the following conclusions were reached concerning PIP revisions:

- a. No dramatic solutions to the problems of establishing bilingual programs would be available either from the existing PIPs or from the field-test sites. Therefore, revised PIPs based on these sources of information would be of limited value. While the study has suggested some directions that could be taken in developing project implementation materials, the actual development would be outside of the scope of the study.
- b. There are no existing diffusion systems capable of diffusing intact, bilingual projects. Furthermore, given the nature of the available bilingual projects, development of such a system is probably unwarranted and may be impossible.

To elaborate, we have found that there are few real differences among the four bilingual PIPs and that the total amount of practical information in the PIP manuals is rather limited. In particular, we concluded that the amount of information in the PIPs did not justify the development of a polished management manual. From the perspective elaborated in this report, any such materials should be conceived and developed only within the context of a well-thought-out diffusion system, and the justification for developing such a system should be to get effective projects and practices to LEAs that need them. In the case of the management guidelines, no such system exists, nor do the projects as described in the PIPs justify the development of a system. Given that a manual based solely on information extracted from the PIPs (or from the PIPs plus the field-test experience) would contain little that was not widely available elsewhere, and that there is currently no specific demand for the manual, the effort of production was judged not to be warranted.

8.3.2 Alternative, Substudy I Products

8.3.2.1 A comparative analysis of the four bilingual-PIP projects.

In lieu of a revised management manual, a detailed analysis of PIP contents was prepared for this report (Appendix C). The purpose of this analysis is to ensure that the content of the PIPs is readily available for the use or information of any interested persons, and to document the problems with the PIP projects in the most efficient manner. The appendix describes the contents of the four PIPs in terms of a bilingual-project framework that highlights not only the similarities and differences among the four projects, but also the potentially important topics that are not addressed in any of the packages.

8.3.2.2 A framework for planning or analyzing a diffusion system.

A second major product of the diffusion substudy is the approach to developing frameworks or "models" of diffusion systems. The approach is specifically intended for systems designed and operated by agencies such as USOE or SEAs for large scale diffusion of projects or practices. The frameworks:

- Integrate the goals, projects, target LEAs, delivery system, incentives, and effects of competition.
- Include the processes of information transfer, decision making, and resource allocation.
- Focus on actions that the system operators (e.g., USOE) can take to achieve system goals, such as selecting and training diffusion personnel, developing guidelines and materials, and allocating resources.

This approach was initially developed by RMC for Studies 2 and 6, and was extensively revised in the bilingual PIP study. It is described in Appendix E of this report.

8.4 Synopsis of Recommendations from Substudy I

8.4.1 General Recommendations for Future Diffusion Efforts

The major conclusion to be drawn from the PIP field tests is that a successful diffusion effort would require careful, systematic planning. This planning must include:

- Establishing specific, practicable goals.
- Selecting (or developing) and validating appropriate practices.
- Analyzing target LEA needs.
- Developing a delivery system, with an appropriate balance of coordinated technical assistance and packaging.
- Providing incentives, if needed.
- Considering the competition, and adapting the diffusion system as necessary.

Furthermore, the PIP concepts are not suitable for the diffusion of complete, bilingual projects or other projects of comparable complexity. Specifically:

The PIP Concepts:

Stand-alone packaging

Rapid start-up

Whole-project adoption

Should be replaced by:

Complementary packaging
and technical assistance

Long-term program and
staff development

Tailoring of practices to
local needs

The PIP concept may be appropriate for the diffusion of some structured, relatively self-contained projects or components of projects.

8.4.2 Goal-Specific Recommendations

Detailed diffusion-system recommendations depend on the goals that are set for the system. In particular, a system intended to promote the

diffusion of specific, validated projects or practices with little or no adaptation (e.g., the PIP diffusion system) will be very difficult to establish, and in such a system, each of the six elements listed above represents a major problem area. By contrast, a system that will simply provide target LEAs with access to new ideas and to technical assistance and which permits extensive adaptation is relatively easy to establish. Of course, the two kinds of goals need not be treated as alternatives since, at least in principle, both could be pursued together.

8.4.2.1 Diffusion of specific, validated practices. If a goal similar to that of the PIP diffusion system were retained, that is, to promote accurate replication of specific, carefully developed and validated practices,* then the current study indicates that only a very carefully planned and developed diffusion system could have any chance of meeting the goal. System development would have to include, at a minimum:

- Development and validation of effective practices that would meet the different LEA needs and would recognize the variations among LEAs in availability of resources, management preferences, student needs, and so on. We see the lack of dramatically effective practices as the key weakness in any such diffusion effort.
- Analysis of target LEA needs, resources, and information-seeking characteristics.
- Development or identification of a delivery system that could provide awareness among LEAs, elicit their commitment, and provide them with technical support to implement the practices.
- Incorporation of incentives to ensure that adopters installed the practices and gave them a reasonable trial;

*We assume that the concept of whole-project adoption would be abandoned.

- Coordination with federal, state, local, and professional systems to eliminate sources of conflict.

In addition, if the goal included the long-term maintenance of the projects in adopter sites, a permanent monitoring and technical assistance system would have to be developed and installed.

It is our understanding that the kind of system described above is not consistent with current USOE diffusion policies and, given the characteristics of existing practices, we believe that such a system would not be justified. Therefore, Section 8.4.2.2 suggests a more realistic set of recommendations that would follow from a diffusion goal of disseminating ideas rather than diffusing specific practices.

8.4.2.2 Dissemination of ideas. If a goal that was less stringent in terms of replication were substituted for the diffusion of practices (e.g., to provide LEAs with access to information on the most successful bilingual projects and practices and to facilitate the adoption of any combination of such practices in LEAs that requested assistance), the diffusion* system would still require major changes for optimal effectiveness, but the system might be somewhat less difficult to develop.

Target LEAs would still need to be analyzed to determine their needs and resources and to determine how large the market is for a given kind of information. Existing projects and practices would need to be analyzed to determine the ways in which they differ, the needs they address, and the resources they require, so that this information could be provided to target LEAs.

Delivery systems could then be tailored to the size of the markets and the characteristics of the practices and target LEAs. Promotion, matching practices to sites, and technical assistance would still be required but

*Strictly speaking, this would be a dissemination system rather than a diffusion system.

would vary widely depending upon the above factors. The design of packaging, or of materials in general, should be considered only within the context of specific dissemination plans. Development of elaborate dissemination materials would be undertaken only where large audiences were involved or long shelf lives for the materials were anticipated.

External incentives would play a minor role in such a system, since the emphasis would be on responding to LEA requests. Coordination with other agencies would remain an important consideration so that conflicts and redundancy could be minimized.

SUBSTUDY II: IMPACT ON STUDENTS

9. INTRODUCTION TO SUBSTUDY II: IMPACT ON STUDENTS

9.1 Scope of Substudy II

9.1.1 Substudy II Objectives

The second objective in the RFP for the bilingual-PIP field-test study was to "determine the effectiveness of projects implemented via the PIPs in improving student achievement and attitude" (Section 4.1). Substudy II, the impact substudy, was conducted in response to this objective. Section 12 includes a discussion of impacts on attitudes. Sections 9-11 are concerned with the evaluation of impacts on achievement.

It should be kept in mind, however, that the primary focus of the entire, two-year, bilingual-PIP study was the process evaluation (Substudy I). The impact substudy received secondary emphasis because it was not certain in advance that the diffusion system would produce the intended result of complete replication in the target LEAs (and, in fact, it did not). Because of this uncertainty, it was not clear how much effort should be invested in student outcome evaluation. Furthermore, because the study paralleled the first two years of a five-year implementation plan, data could only be collected from grades K-2 of projects that would eventually expand to fourth grade. Therefore, the study could not provide student outcome results from completely implemented, fully operational programs.

On the other hand if USOE had waited two years for the diffusion results before considering an outcome evaluation, much of the data needed for a longitudinal impact assessment might never have been collected. Thus, it was reasonable to include a limited form of impact evaluation in the bilingual-PIP field-test study.

The important point to emphasize is that, in this study, the attempt to evaluate project impact was independent of how well the projects, as described in the PIPs, had been implemented. The attempt was to evaluate

each project as it was operating. Interpretation of project impact, of course, must depend on the features of the project that are in place; but, because the two questions had to be addressed concurrently, the study approach was to develop the best possible outcome evaluation for each site, whether or not the PIPs had been effective in producing faithful adoptions.

9.1.2 Specific Impact-Substudy Questions

The impact evaluation was intended to measure improvements in student achievement resulting from the diffusion effort.* Of course, Substudy I, which provided the information as to the kinds of changes in field-test-site programs, was the key to interpreting the impact results and attributing any gains to program changes. The purpose of the impact substudy was to determine how much, if at all, student performance improved after implementation of the PIP-projects.

Four major subject areas were included in the impact substudy:

- English reading
- Spanish or French reading
- English language proficiency
- Math

Many of the field-test sites included additional subject areas in their local evaluations, and these areas were examined by RMC. In particular, data on Spanish or French language proficiency were examined where available and are included in Appendix D. However, the four areas listed above represented a common core in most of the sites and thus received most of the attention in the RMC study.

Initially, it was RMC's intention to answer the impact substudy questions through careful application of state-of-the-art evaluation

*Affective outcomes are discussed in Section 12. Section 12 also includes brief discussions of evaluations of staff development and parent/community components.

methodology. As the study progressed, it became increasingly clear that the state-of-the-art was inadequate to provide the desired answers, and RMC's impact-substudy emphasis shifted toward methodological issues (see Section 10: Technical Issues). By the end of the study, the major impact questions had become:

- In general, how if at all, is it possible to determine the impact of new educational programs in real-school settings?
- Specifically, are there credible impact results (either positive or negative) from any of the field-test sites?

These questions are addressed below.

9.2 The RMC Role in the Impact Substudy

Unlike Substudy I, in which RMC's role was that of a non-reactive observer, RMC was intended to play an active role in the impact evaluations. Specifically, RMC was to utilize the evaluations being conducted independently by each of the field-test sites under the conditions of the Title VII regulations, and to summarize or reanalyze the results of these studies as necessary for the purposes of the PIP study. Further, RMC was to meet with the local evaluators at the beginning of the field-test to assist the evaluators in designing enough similarity into their various evaluations to permit some summarizing of results across sites. It was also intended that RMC should provide consulting help as required to insure the quality of all evaluations.

RMC was not expected to collect data, to perform the original analyses on the data, or to participate in the preparation of field-test-site Title VII evaluation reports. In all interactions, RMC's role was that of a consultant, and all evaluation decisions were ultimately in the hands of the individual LEAs.

9.3 Organization of the Substudy II Report

The remaining sections of this report describe the technical issues, the impact substudy activities, and the results of these activities. Section 10 discusses both the theoretical issues involved in conducting impact evaluations and the practical problems encountered in the field-test sites. Section 11 describes the first year of the substudy, which was devoted primarily to the development of the local evaluation designs. Section 11 also describes the second year of the study which began with attempts to interpret local evaluation results, and ended with the development and application of procedures to rate the credibility of impact results from each site. Section 12 summarizes the issues related to evaluations of student attitudes, staff development activities, and parent/community involvement components. Section 13 summarizes the conclusions and recommendations from the impact substudy.

10. TECHNICAL ISSUES IN THE EVALUATION OF STUDENT ACHIEVEMENT IMPACTS

10.1 "Impact" Versus "Performance Level" Evaluation

This report refers repeatedly to the impact on achievement of a diffusion system, a program, or a project. By this we mean the change (hopefully improvement) in performance produced by new practices. The impact question is emphasized here because this was a diffusion study, and the justification for spending time and money on diffusion derives from the change that results. Impact on achievement is not the only impact of interest, but it is a special concern of many educators and diffusion personnel.

Impact on achievement may also be of interest to the LEA, because most LEA decision makers would like to know whether changes in practices are followed by improved performance. However, the more important achievement consideration from the LEA point of view may be the performance level of the students. "Performance level" refers here to how well or poorly students are achieving in relation to other groups of students or in terms of requirements for jobs and personal satisfaction. An LEA may not be satisfied with a large impact if performance level is still low. Conversely, the LEA may be entirely satisfied with a small positive impact if performance levels were already high.

From the standpoint of the diffusion-system planner, however, impact is the primary consideration. High performance levels are no indication of diffusion-system success, since they do not necessarily prove that there has been improvement due to the diffusion effort. Conversely, low performance levels do not necessarily imply diffusion-system failure, since they may represent improvement over still lower levels of performance. (The distinction between student performance level and diffusion-system impact is illustrated in Figure 3, Section 3.1.3.)

Thus, to the extent that student achievement outcomes are addressed in this diffusion study, the emphasis is on the impact produced by the bilingual-PIP diffusion system. Performance level is also discussed, but has only indirect relevance to the study.

10.2 "Apparent" Versus "Actual" Impacts of Exemplary Programs

One might naively assume that positive achievement impacts would result from the successful diffusion of exemplary projects (i.e., in the PIP studies, from the diffusion of projects having apparently positive impacts in the developer sites). Of course, as noted in Section 1.1.1.3, a single project in two different contexts leads to two different programs, and the fact that the original program was effective does not necessarily imply that the adopter-site program should be effective. However, an additional factor--the evaluation (and, in particular, the variation or error in evaluation procedures)--is involved in the apparent impact of a project on achievement. That is, the apparent impact is a function of the project, the context, and the evaluation (see Figure 4, Section 3.1.3).

In a diffusion impact study, problems arise because the measurement of program impact in the real world is very inexact. First, because of evaluation error, two different evaluations of the identical program may produce very different results. Further, the amount of error in most program evaluations (bilingual or other) is large in comparison to typical program impacts on student scores (up to several times as large). Finally, the step of separating project impacts from context impacts is next to impossible in many LEAs.

The net result is that even the most faithful replication of an exemplary project in a new site is not likely to reproduce the original program, and even if the programs were identical, differences (errors) in the evaluations of the originating and replicating sites would make it unlikely that the apparent impact of the project would be the same in the originating and replicating sites. The actual impact of a project is an elusive concept and, in practice, is very difficult to determine under field test conditions.

10.3 Clarification of the Impact-Evaluation Questions

The basic Substudy II question was--What were the impacts on student achievement of the bilingual projects in the field-test sites? As we shall explain in Section 12, the answer, after two years of evaluation, is that no one can be sure. In some part, the lack of information is due to deficiencies in the field-test-site evaluation reports discussed in Section 12, but the fundamental problems lie in the evaluations themselves, and in the current state-of-the-art in evaluation methodology.

The major problems are discussed later in this section, but before considering them individually, it is essential to make some important distinctions among the different kinds of outcome evaluation questions that may be asked and among the respective problems inherent in answering the questions. As will be seen, the question of "program impact" is the most interesting question from the perspective of this study, but also the most difficult to answer. Other questions that are easier to answer may also be of interest but, unfortunately, there is usually a direct relationship between level of interest and difficulty in obtaining answers.

The definition of evaluation questions is an extremely complex subject, and can be approached from many perspectives. At the risk of oversimplifying, this discussion divides the impact questions into (a) those concerning the skill (or knowledge) areas in which student performance is to be measured, and (b) those related to the standards against which performance is to be compared.

10.3.1 Defining the Skill Areas of Interest

10.3.1.1 Measuring appropriate skill areas in program evaluations.

A major goal of most bilingual programs is to improve student performance. It is not really meaningful, however, to speak of performance in general, and the evaluator must first determine which skill areas are of interest. That is, the evaluator must ask which general subject areas to evaluate (e.g., reading, math, language, and so on), and, for each area, whether

only specific topics are of interest (e.g., decoding, computation, local ecology). Although it is seldom done, the evaluator should also ask whether students gain in one area at the expense of another (e.g., does reading improve at the expense of math?).

The evaluator must next consider whether the tests used in the evaluation provide valid measures of the skill areas of interest. The answer will depend to some extent on the interaction between the test and the program. That is, a test of general reading skills may be relatively insensitive to the impact of a program that focuses on a few, specific, component skills. On the other hand, a test that is tailored to the program curriculum may give an unrealistic picture of general reading improvement. How closely the test should match the curriculum is an unresolved dilemma in educational evaluation, but the effects of the match on performance measures are not difficult to understand and should be addressed when interpreting any evaluation results.

10.3.1.2 Limitations on skill areas measured in the bilingual-PIP study. The basic question that this study was designed to answer is--Did the PIPs help the adopter-sites? As discussed in Parts A and B of this volume, the answer is complex since changes in processes as well as in student performance may constitute improvements. We have also pointed out that the student performance questions must be separated from the implementation questions, so that in this part of the report we are asking only about the impact of the programs as they exist. Only after obtaining clear answers to these impact questions would we have been able to proceed to drawing conclusions about the relation of program (and contextual) features to impacts. Consequently, the student outcome evaluation was focused on one, restricted question: "Did PIP-program students learn more than comparable district students were learning before the implementation of the program?"

Considering this question from the perspective of the skill-area discussion, above, it is easy to see that considerable uncertainty must remain in any but the most elaborate of evaluations. In the bilingual-PIP study,

performance measures consisted of a limited number of tests, and the skill areas that were measured may not have been precisely appropriate to the questions being asked. Further, no systematic attempt was made by RMC to determine the impacts of the programs in subject areas outside of reading, language, and math. Therefore, strictly speaking, the study question became restricted to--Did program students learn more in the specific skill areas reflected in the tests?

10.3.2 Obtaining Comparison Standards

10.3.2.1 Commonly used standards of comparison. Given this specification of the skill and knowledge areas being addressed in the bilingual-PIP study, it is then possible to consider whether students performed better in these areas than some relevant standard, and, if so, whether the improvement was due to the bilingual program. Four commonly used comparison standards are listed below, with indications of the questions to which they are relevant, and of the significance of those questions.

- Posttest compared to pretest. This widely-used comparison answers the question--Did students learn anything while in the program? In general, this question is of no interest, since most students show pretest-to-posttest gains in any program. By itself, this comparison provides no information without one of the following about either the size of gains or the role of the bilingual program in producing the gains.
- National norms. This is the comparison standard used in the vast majority of educational evaluations.* It answers the question--Did students learn more in the measured skill areas than the nation-wide average for students who obtained the same

*The use of grade-equivalent scores is a special case of using national norms as a comparison standard. However, while national norms often provide a useful comparison, percentiles or standard scores should always be used. Grade equivalent scores are not suitable for any evaluation purposes (see Volume III).

pretest scores (e.g., if program students scored at the thirtieth percentile on the pretest, did they learn more than the average of thirtieth percentile students in the country)? This comparison tells us whether the gain was large or small by national standards, but not whether it was larger than similar students in the field-test site achieved before the PIP program, and not whether impacts, if any, were due to the bilingual program. The reason is that schools vary widely in terms of achievement gains even where no special projects are involved. Presumably this variation among schools reflects differences in student, community, and school characteristics, and may apply equally to all programs in a given school.

- Local, historical norms. Local comparisons answer questions about how program students compare to other students in other programs in the same district. Of the large number of different comparisons that may be possible, many may be of interest to district personnel. However, for the purposes of evaluating the bilingual programs in this study, only comparisons to similar students are of great interest. These comparisons tell us whether gains are large or small by local (but not national) standards. In addition, where no changes in the school or context have occurred other than the introduction of the bilingual program, comparison to local norms allows us to attribute an improvement to the new (or refined) program. Thus, adequate local, historical norms can tell us a great deal about impact. Unfortunately, few districts maintain such norms.
- Concurrent control or comparison groups. According to conventional evaluation lore, control groups provide the best standards by which to judge a program. In practice, however, such comparisons are usually not satisfactory for determining the impacts of bilingual programs. For these programs, comparison groups are usually composed of dissimilar students and there is no way to tell whether differences in performance are due to

program effects or student characteristics. Truly randomized assignment to groups may not be appropriate, even if it were possible, since assignment to the control group may constitute a negative treatment from the students' perspective. In principle, students could be assigned randomly to alternative bilingual programs in order to determine which is better, although we are not aware of any recent studies of this type in school settings. In short, available, local comparison groups often provide little information about program impact.

- Optimal design. In combination with local norms, comparison groups could be used to rule out district-wide changes that might otherwise appear to be program impacts. Thus, the optimal design for impact evaluation would make use of both local, historical norms, and concurrent, local comparison groups.

10.3.2.2 Comparison-standard constraints on the bilingual-PIP study.

As suggested in the above list, the question of whether program students performed well or poorly by national standards could be answered by comparing program-student gains to the norms of standardized tests. This question, however, was only of secondary interest in the study. The more important question--the impact question--required accurate measures of how well similar students had performed in previous years, plus concurrent comparison groups and other information to rule out changes in the student population, school program, or community that might have led to improved performance. In most sites, the required historical measures were simply not available, there was no way even in principle to reconstruct them, and thus the question of program impact on student performance could not be answered conclusively.

In retrospect, there were several reasons for the lack of precise standards against which to judge program impacts. At the beginning of the study, some of the issues discussed here were not familiar to field-test-site personnel, and were not completely clear to RMC, USOE, or evaluation specialists in general. For example, the technical limitations on using

national norms in impact evaluations are only now being explored (by RMC and Title I TACs under this and other contracts). The problems with concurrent comparison or control groups in bilingual-program evaluations were recognized, but the total impracticality of obtaining groups adequate for impact evaluation in most of the field-test sites (due to legal, administrative, and financial constraints) was not.

Many of these problems were identified early in the study and, as early as the fall 1977 meeting between RMC and the local evaluators, the need for baseline or historical normative data was agreed upon. However, adequate data were not available in most sites, and legal, administrative, and financial constraints precluded collecting the biographical data that might have served as a partial substitute for local achievement-test norms. Thus, instead of conclusive measures of bilingual-program impact, the most useful product of the impact evaluation may have been the preliminary draft guide to bilingual program evaluation (Volume III of this report). This draft guide reflects some of the new insights gained in this study and should contribute to the preparation of more realistic evaluation questions for future diffusion studies, and more effective evaluation designs for answering those questions.

10.4 Practical Problems in Answering the Substudy II Questions

It must be emphasized that the issues of test-to-curriculum match and lack of comparison groups were only two of the many problems affecting the credibility of the impact evaluations. In many cases, the additional problems were completely beyond the control of the local evaluators. The major problems are listed below, together with brief indications as to how, if at all, some of the problems might be resolved in future studies.

10.4.1 Problems Deriving from the Field-Test Design

10.4.1.1 Variance in initial conditions. Although nominally all sites were in their first two years of implementing bilingual projects, there were tremendous differences in staff and district experience in bilingual education. Some sites were totally new to bilingual education, while others had had years of previous experience. This made it difficult to separate results due to experience from results due to the effects of the PIP.

10.4.1.2 Variance in implementation. The sites also varied in their implementation of the projects described in the PIPs. Some made only minor variations in PIP-specified staffing or scheduling, while others made major changes in the projects and had student populations that were completely different from those of the developer sites. Some sites were trying to implement the projects as described in the PIPs, but were phasing in the projects over periods of several years, and thus could not be evaluated adequately during the early years of implementation.

Because there were only 19 sites and many variations in the projects, it was not feasible to perform a mathematical analysis relating level of implementation to student performance. Therefore, a case-study approach was followed in looking at outcome evaluations from each site.

10.4.1.3 Evaluation of fragments of the projects. Because of the two-year time limit of the study, we observed only the first three grades (K-2) of programs designed to include five grade levels. The sites started

with K-1 during the first year, and expanded to second grade in the second year. Although gains in language, math, and some other content areas may show up in these grades, improvement in English reading, which was not introduced until second or third grade in some sites, may be observable only when the present students are in the third or fourth grades.

10.4.1.4 Evaluation of the first year of implementation. The first year of a program is not a good time to evaluate impact. Because of the one-year-at-a-time, upward expansion design of the projects, we were evaluating the first year of operation for second-grade classes, even in the second year of the study.

10.4.1.5 Testing of young children. Because second grade was the highest grade included in the study, the reliability and validity problems of testing young children introduced a major source of uncertainty in the results. In kindergarten, the curriculum content is especially difficult to test. In all three grades, children have relatively short attention spans and limited test-taking experience. Some misinterpret instructions and lack the mechanical skills required to take the tests.

10.4.2 Problems Typical of Local Program Evaluations

10.4.2.1 Undefined project goals. The first step in designing the evaluations was intended to be the specification of program goals and objectives in a form suitable for evaluation. For most sites, specification in sufficient detail was not possible during the two years of the study, since project personnel were feeling their way to a great extent. By and large, project directors simply did not know exactly when students should be using which languages and to what degree, nor did they know in which subject areas they expected major project impacts. In addition, the nominal project goals sometimes conflicted with district goals. The only real solution to this problem is to continue outcome evaluation activities until realistic program goals have been firmly established, rather than attempting to produce definitive results in the formative stages of the program.

10.4.2.2 Describing students. In order to interpret student achievement gains, it is necessary to have an accurate picture of the entering skills and the previous experience of the students. One of the most important skills in a bilingual program is language skill, and this must be measured in the native language as well as in English. While several tests are widely used for this purpose, none of the sites was completely satisfied with either the effort required to administer the tests or the accuracy of the results. Improvements in this area are within the state-of-the-art, but will involve major research and development efforts and are definitely beyond the capabilities of individual LEAs or of studies such as the PIP field test.

In addition to language skills, it is necessary to know where each student stands on a number of biographic and demographic variates. This information is essential for the interpretation of gains when comparing students to control groups or against any other standard. This information is seldom reported but could be collected easily given proper guidelines and resources. No technological breakthroughs are required. Several sites made substantial efforts in this area during the second year.

10.4.2.3 Finding technically adequate tests. The better-known standardized tests in English are all fairly satisfactory in terms of reliability. The validity of these tests as measures of bilingual-project impacts has been widely questioned. Only a few standardized tests are available in Spanish, and virtually none in most other languages. So called criterion-referenced tests are somewhat more available, but are not usually suitable for measuring project impact due to their poor psychometric properties (see Appendix B in Tallmadge and Horst, 1975).

Aside from content problems, the major practical problem was the selection of appropriate levels of the tests. A large proportion of the sites experienced floor effects (especially in the first grade), which result in mean scores for the groups that are unrealistically high. Where this occurs on a pretest, the amount of apparent impact is reduced.

Test development is a well-established field, and better tests for evaluating bilingual projects could be constructed. However, it would be a very difficult and costly job if done correctly, and the commercial test publishers are constrained by many economic and practical considerations. Selecting the correct level of a test can be done quite readily with a little pilot testing, but this takes time and money at the local level.

10.4.2.4 Collecting and analyzing the data. In practice, no area is better understood or more generally abused than the collecting and processing of test scores. It is well known to all evaluators that testing conditions must be orderly and carefully standardized, and that testing must occur in reasonable time periods. Nevertheless, many sites had minimal training of testors during the first year, and testing dates for fall pretesting slipped badly in several sites. For the second year, RMC arranged site visits to coincide with testing periods in most sites, and found that, while a variety of problems remained, testing problems had been greatly reduced in many sites.

Data analysis is also well understood by most of the field-test-site evaluators, but first year reports, due in part to time pressures, abounded with inappropriate or incomplete analyses. With the increased emphasis on outcome evaluation in the second year of the study, RMC was able to reanalyze results from the information provided by many of the sites, together with information from RMC site visits but, for some sites, the basic data were simply unavailable.

11. EVALUATION OF ACHIEVEMENT IMPACTS:
PROCEDURES AND RESULTS

11.1 Substudy II: Year One

Because of the start-up status of the projects, first-year impact data were of secondary interest. The major purpose of the first-year impact-evaluation effort was to work out any problems so that all field-test sites could have adequate evaluations in place by the start of the second year.

11.1.1 First-Year RMC Activities

11.1.1.1 August 1977 meeting with field-test-site personnel. The first meeting between RMC and the local evaluators (and project directors) was held in conjunction with the OBE Silver Spring, Maryland, meeting of PIP adopter-site project directors in August 1977. RMC was allotted one afternoon at this meeting to present some basic evaluation design guidelines on choosing tests and comparison groups, and to obtain reactions from the LEA representatives as to the effects of these guidelines on their plans.

It quickly became apparent that the brief presentation would not result in evaluations that met RMC criteria for credibility. A large proportion of the sites requested immediate individual assistance at a more detailed level. Local problems ran the complete gamut--from district constraints on test selection, lack of useful comparison groups, and absence of clearly stated project objectives, to the lack of any evaluator at all. In most sites, evaluators had just started working, and only a few had had a chance to consider all of the issues raised by RMC.

11.1.1.2 September 1977 workshop for evaluators and project directors. In an attempt to finalize local evaluation designs and produce the desired uniformity among sites, RMC organized a two-day workshop in Palo Alto for mid-September. The topics covered included:

- Identifying project goals to be evaluated.
- Developing an evaluation design (finding a comparison) for each goal.
- Selecting project students and comparison groups.
- Selecting tests (both technical issues, and matching of tests to goals).
- Data collection procedures for fall pretests.
- Initiating local test development.
- Site-specific problems and topics requested by sites.

For most topics, an RMC presentation was followed by group discussion. Then each project director and local evaluator, using structured worksheets, attempted to apply the principles that had been agreed upon to their local situation.

RMC was immediately impressed by the technical sophistication of the local evaluators, who were generally aware of the problems discussed in the workshops and ready to share their own findings and attempted solutions. However, most faced local constraints in specifying goals, finding comparison groups, selecting and administering tests, and other critical areas. In addition, most were hired from outside of the LEAs themselves, and many faced severe time constraints (e.g., as little as 20 to 25 days to design the evaluation, organize fall and spring testing, and train testors, process and analyze both sets of data, write the evaluation report, and provide in-person feedback to teachers and administrative personnel). The net result was that the workshop ended with general consensus on principles that should be followed in all the local evaluations, but with considerable uncertainty in all sites as to how these principles could be carried out in practice.

11.1.1.3 First-year site visits. RMC attempted to pursue specific problems with each site during the October site visits, and to follow up during winter and spring visits as well as via telephone and mail. By the end of the spring visits, however, it was clear that the impact of the RMC effort on the first-year evaluations had been minimal. The good intentions of the local evaluators had been largely subverted by the constraints of time, local conditions, and LEA policies. The lack of convincing first-year evaluations was of no great concern, as noted above, but there was major concern over the fact that few of the sites showed promise of much improvement for the second year. In an attempt to improve the second year evaluations, RMC organized a second special meeting of evaluators and project directors--this time held for three days in San Jose, California, July 1978.

11.1.1.4 July 1978 seminar for evaluators and project directors. The July seminar was organized differently from the workshop of the previous September in two respects. First, it was much more directive, and focused very specifically on the key evaluation problems identified during the first year. Second, the RMC role as presenters was greatly reduced. Instead, much of the first two days of the seminar consisted of presentations by the experienced, local evaluators explaining their solutions to particular problems, and of group discussions attempting to reach consensus on the best ways to deal with the unsolved problems. The areas of greatest concern were:

- lack of any meaningful standards of comparison for project impact.
- lack of match among project goals, curricula, and tests.
- lack of adequate assessment of language proficiency.
- inadequate testing procedures.
- exclusion of affective and other project goals from the evaluation designs.

The third day of the seminar was spent in a review by each project director and evaluator of their own evaluation design and on an attempt to organize a cooperative, cross-site comparison group (a sort of mini norm group) by pooling the data from the small numbers of control students reported to be available at many sites.

The seminar broke up on a note of enthusiasm and commitment from the entire group, although specific issues remained unresolved at all sites. RMC agreed to coordinate the cross-site-comparison-group effort as well as a parallel effort to collect student biographical data for use with either the cross-site, or local, historical comparison groups. Evaluators and project directors resolved to return to their districts and take up the unresolved issues with the appropriate administrators.

11.1.1.5 Seminar follow-up activities. In the week following the seminar, RMC generated the forms and guidelines requested by the sites for collecting biographical data, and prepared a summary of seminar recommendations in all the major areas of concern. In subsequent weeks, all sites were followed up by telephone to encourage them to finalize their designs and to determine to what extent they could contribute to, or profit from, the cross-site comparison group. By the beginning of September it was clear that the effects of the seminar and follow-up activities had been minimal in most sites.

11.1.1.6 Preparation of site-specific evaluation recommendations. With second-year pretesting due to begin shortly, and many sites still without defensible decisions on comparison groups, test selection and other major issues, RMC prepared specific recommendations in the following areas (see Figure 14):

- Describing student language skills, demographic, and biographic characteristics;
- Providing a meaningful comparison group;

Minimal Criteria for Interpretable Impact Evaluations	General Comments
<u>Describe Students</u> 1. Language Proficiency - Pretest <u>all</u> project students with LAS or equivalent test of oral production 2. Demographic & Biographic Data - Collect items of information listed on attached sheet <u>Provide Meaningful Comparison Groups</u> 1. Minimum comparison (listed in order of generally increasing credibility) A. Regional norms B. Local historical data C. Cross-site comparison group D. Advanced cohort design E. Local comparison/control group 2. Local comparison/control group in combination with one of A-D <u>Use Technically Adequate Achievement Tests</u> 1. Grade 1: CTBS Level B or equivalent Grade 2: CTBS Level C or equivalent (Form S, English & Spanish versions)	The students' environment, entering language skill, and previous training generally have more impact on test scores than do instructional programs. These factors <u>must</u> be known if evaluations are to be interpretable. The comparison group determines which questions can be answered. Probably the most important policy question is whether students consistently do better in bilingual programs than in conventional classrooms. <u>Other</u> questions that may be of interest are: • Are bilingual projects better than ESL projects? • Is a particular bilingual project better than the average bilingual project in the region? • Etc. InterAmerican (Spanish & English) Level 1 Reading and Math: Difficult for 1st and 2nd grades (floor effects). CTBS Level B: Somewhat difficult at beginning of Grade 1. OK at end. CTBS Level C: OK at beginning of Grade 2. Somewhat easy at end (possible ceiling effects).

Figure 14. General impact evaluation guidelines for PIP field-test sites, September 1978.

Minimal Criteria for Interpretable Impact Evaluations	General Comments
<u>Match Tests to Project Curriculum</u> 1. Nominal match A. Reading: Spanish & English B. Math: Language of instruction C. Oral Language: (E&S) LAS or equivalent (pre & posttest) D. Affective: ARS or equivalent (Bob Olsen) 2. Systematic Match of subtest items to curriculum content <u>Use Adequate Testing Dates and Scoring Procedures</u> 1. • Careful training for testors • Test reading and math between October 1 and 31 • Verify scoring	In order to demonstrate benefits from a project, you <u>must</u> test the subject areas and the specific content in which the students benefit. You must also consider <u>when</u> benefits are expected in each content area (i.e., K, 1, 2?) The perfect design is of no value unless the data are clean. It is our impression that <u>many</u> PIP sites had <u>major</u> testing problems during the first year.

Figure 14. (continued)

- Selecting technically adequate achievement tests;
- Matching tests to project curricula;
- Testing and data processing procedures.

Then for each site, RMC prepared an individual summary of exactly what we perceived to be wrong with their evaluation in each of the above areas. For each problem area, specific tests, comparison groups, testing procedures, and so on were recommended. The impacts of these recommendations are described below. In general, the most practicable recommendations concerned changes in the tests being used in some sites. In the troublesome area of comparison groups, RMC was no better able than were the local evaluators to create such groups where none existed.

11.1.2 RMC Impacts on Field-Test-Site Evaluations

11.1.2.1 Impacts on evaluation designs. By the end of the first year, the impacts of RMC workshops and consulting were more limited than RMC had hoped. In general, this was not because of any conflict between nominal, local evaluation goals and RMC study goals. The same problems that made the evaluations inadequate for RMC's purposes also made them inadequate to meet nominal, local needs. However, the realities of local project evaluation encourage evaluators to search for evidence of positive impacts rather than to develop the most accurate picture of total project impact. In addition, local evaluators faced constraints of time and of entrenched local evaluation practices. Then too, there were no conditions in their grants compelling them to follow RMC recommendations, nor had they made provisions in planning or budgeting to do so. The RMC contract did not provide for actually conducting outcome evaluation activities at the sites, and with no pat solutions to offer, RMC arguments had only moderate weight. In the final analysis, local pressures and constraints were the major factors in shaping the evaluations.

It is reasonable to ask at this point whether any major improvement in the designs could be possible. The answer is that many of the problems

could be readily eliminated given the resources and the motivation to do so. However, producing truly credible impact evaluations would require long-term programs to develop local norms, and would involve major changes in selection of tests, testing schedules, and so on. Most districts will not make such changes lightly and, in particular, they will not make them to accommodate a single program without conviction that the changes will be of real benefit to the district.

11.1.2.2 Impacts on evaluation reports. It was originally intended that RMC's primary source of outcome data would be the evaluation reports prepared by the field-test sites for submission to Title VII. With this in mind, RMC devoted some time at each of the evaluation seminars to the subjects of report content and format. As RMC began receiving copies of the second-year reports in August and September of 1979, it quickly became clear that the RMC recommendations had had little or no impact. Most of the reports failed to include the basic information necessary for interpretability of mean test scores (i.e., test level and publication date, type of score, number of students, standard deviation). None covered the complete set of essential topics (i.e., students' incoming skills and experience, program instructional characteristics, test-content match, testing procedures, and analysis procedures), at even a rudimentary level. Most unfortunately, few discussed the plausibility of the remarkably large gains that were often reported (see Appendix D), and few tied these gains logically to any specific instructional treatments.

Because of the lack of precedent for major impacts by special programs, we believe that the burden of proof lies with the evaluator and, while the PIP field-test-site reports were certainly no worse than other local evaluation reports for bilingual or other programs, few of them could be considered even moderately convincing. Since we knew that most of the PIP-site evaluators understood the issues involved, we assumed that the problems with the reports were due to time pressures, plus the pressure to show positive results, in combination with the lack of any pressure to produce accurate, convincing evaluations. This issue is discussed further under "second-year results," Section 11.2.3.

11.1.3 Synopsis of First-Year Evaluations

The summaries included here are taken from the 16 final 1977-1978 reports received by RMC. In these reports, most evaluators demonstrated an understanding of what would constitute an ideal evaluation paradigm. However, available resources, especially evaluator time, varied widely from site to site. Thus, even with excellent technical skills, the best of intentions, and the professional support of the other adopter-site evaluators and the RMC staff, many sites were unable to produce adequate evaluation reports during the first year. In most cases where evaluators did have the time and other resources needed to address all of their tasks, the problems discussed in the preceding section precluded truly convincing evaluation reports.

11.1.3.1 Description of students. Seven different measures were used to assess the language proficiency and dominance of the students in the ten Spanish language sites alone. Rather than being used to demonstrate growth, these data were collected primarily for the purpose of student selection and legal compliance, and were not always included in the final reports.

When achievement data were interpreted with reference to the language proficiency of the project students (LES/NES vs. FES), the criteria by which such designations were made were rarely provided. Since some tests of language proficiency have built-in cutoff scores, the sites may have relied on those criteria. For the purpose of selecting students, scores on tests of language proficiency were often combined with teacher judgment.

Only two of the 16 reports presented any biographic data collected on individual students for either the project or control groups. Such information, when it was provided, included: (a) whether the child was enrolled in any other special projects, (b) the socioeconomic status of the child's family, and (c) the language spoken by the child at home.

By contrast, eleven sites provided substantial information summarizing the demographic characteristics of the school or community in which the project was located. These data most frequently included the size, ethnic composition, industry, and occupations of the area. Statistics on rates of absenteeism were reported by only three sites. Project impact was never interpreted in light of these biographic and demographic characteristics, which were provided merely for purposes of describing the project context.

11.1.3.2 Comparison groups. Considering the many groups for which project outcomes were to be evaluated (English and Spanish; math, oral language, and reading; grades K, 1, and 2), it is not surprising that most sites applied several different evaluation strategies in an effort to use the best procedure possible in each situation. For one site, this included the use of historical data, national norms and, where no other choice was available, the computation of raw-score gains. Although the use of the historical data necessitated making some untested assumptions concerning summer loss and other factors, it remained a significant improvement over simply reporting posttest-minus-pretest scores.

A comparison-group design using either adjusted or unadjusted post-test scores was used to evaluate one or more project components at a total of seven sites. In about half of these cases, assignment to project or comparison groups approximated a random basis, while in the others the comparison was made to local students enrolled in the state's bilingual program, and selection statistically biased. Instruction in the latter seemed to be regarded as only minimally different from the instruction received in the regular non-bilingual classroom.

National norms were used to derive a no-project expectation in five sites. The late arrival of tests, the absence of Spanish language norms and the apparent contamination of existing norms made such a design only minimally applicable. Finally, of the 16 sites, six relied upon the analysis of unadjusted pre- to posttest gains to evaluate some, if not all of their project components.

In a few cases, an objective was set such that any raw-score gain satisfied the expectation. The rationale for selecting a particular raw-gain criterion was never provided. In some of these cases, where it was possible to relate the gain objective to the national (or local) standard deviation, it was found (by RMC) to represent a trivial expectation. In the one or two of these cases where raw gain objectives could be related to percentiles, the expected gain actually represented a loss in percentile standing from pre- to posttest. Working to achieve such small gains, the objective was often far surpassed and looked deceptively impressive. However, in other sites, program students made substantial gains with respect to the national norms (see Appendix D).

11.1.3.3 Selection of achievement tests. A total of eight nationally standardized tests was used to assess achievement outcomes in the English language. These included:

- Test of Basic Experiences (TOBE)
- Inter-American
- Comprehensive Test of Basic Skills (CTBS)
- Gates-McGinitie Reading Tests
- Boehm Test of Basic Concepts
- SRA Achievement Series
- California Achievement Test (CAT)
- Metropolitan Achievement Tests (MAT)

Most often selected were the SRA, TOBE, and CTBS, used by three sites each to measure outcomes in at least one grade level. Five sites administered more than one of the eight tests. The Spanish language versions of the Inter-American and CTBS were also administered.

Means and standard deviations summarizing project- and control-group scores at pretest and posttest indicated that, for eight of the sites, the influence of floor effects threatened the validity of the findings presented. When the problem occurred, it was usually at pretest and was

often (although not always) with LES/NES students being tested in a language in which they had not yet received any formal instruction.

The problem of ceiling effects hindered the interpretation of data from only two of the 14 sites, one of which acknowledged the problem to the extent that it rejected the data prior to analysis. A few additional sites indicated that data had been eliminated because they were considered invalid. Although the reasons behind such decisions were not provided, it is likely that in most cases it was because of floor or ceiling effects.

11.1.3.4 Testing procedures. Since RMC did not observe testing during the first year of the contract, it was not possible to comment on the adequacy of the conditions under which testing took place. It is quite possible that the frequent encounters with test floors represented problems with the test administration (e.g., lack of adequately trained proctors) as often as they reflect the ability level of the students tested.

In general, these findings indicate that inadequate attention was paid to selecting test content or levels appropriate to the students and the curriculum being evaluated. None of the sites indicated that they had carried out any kind of systematic content-to-curriculum match to select tests for the first year of the project, although many had indicated an intention to switch tests in the second year. Subsequent examination by RMC of the second-year data indicated that floor and ceiling effects were not a major problem in most sites, especially for second-grade students.

11.2 Substudy II: Year Two

Outcome-Evaluation Activities: Year 2

Where the major role of RMC in the first year was to assist adopter-sites in the design of evaluations, the intended role for the second year was to interpret the results of the local evaluations and to combine the results to provide an accurate answer to the impact questions. By the end of the first year, it was clear that, for two reasons, the answer to these questions would be less conclusive than could be desired--first, for the reasons discussed under Process Evaluation, above, relatively little grouping of sites by PIP or other study-relevant variables appeared justified. Second, as a result of the evaluation problems discussed in Section 10, it was clear that the local evaluations would not provide precise measures of project impact. For these reasons, the continuing study of evaluation problems and the development of evaluation methodology was perhaps the most productive activity of the second year of the study.

The second-year evaluations, however, represented a considerably greater level of effort on the parts of RMC and local evaluators than did first-year evaluations. The preceding sections have indicated that, in spite of this high level of effort, the resulting evaluations did not produce credible estimates of program impacts. This section describes the development of procedures for judging credibility and discusses the credibility results for the field-test-site impact evaluations.

11.2.1 Preliminary Review of Achievement Impact Results

During the second year of the field test, RMC visited most of the sites in both fall and spring. At least one of these visits was scheduled to coincide with local testing so that a general impression of testing procedures could be obtained. During these visits RMC staff also discussed the progress of the evaluations with the local evaluators.

At RMC's request, several of the sites provided RMC with both fall and spring test data shortly after completion of spring 1979 testing. Completed evaluation reports were received from most of the sites during

the late summer and early fall. All of this information was examined by RMC from the perspective of the impact of the PIP diffusion effort. The question of interest was--"Did the bilingual-program students learn more than they would have learned if the PIP-diffusion effort had not existed?"

In attempting to answer this question all site reports and additional data were screened at a preliminary level following procedures developed previously by RMC (Tallmadge and Horst, 1975; Horst 1978) for validating achievement gains in educational projects. Detailed application of these procedures requires access to data that are not generally included in evaluation reports and therefore, as a pilot effort, RMC selected two sites that had supplied achievement test data for individual students. (Student names were removed by the sites to preserve confidentiality.) The data from these sites were examined exhaustively to rule out common evaluation artifacts. Mean scores were checked, distributions of pretest-posttest scores were plotted and checked for anomalies, effects of dropouts were computed, individual score protocols and item data were examined, and, finally, raw or percentile scores were converted to standard scores.

While a few minor discrepancies were found, by and large, the results supplied by these two sites were accurate. The data showed that, as compared to the norm group for the CTBS-'73, the bilingual program students in second grade had made substantially larger gains in English reading and math from pretest to posttest. Large gains were also reported for the CTBS/Español-'78 in reading and math. As a further check, English reading data from these same students were examined after pretesting third grade in the fall of 1979. These data indicated that the gains were stable and long lasting.

While the results from these sites were encouraging, it was not clear to what extent the new programs were responsible for these gains. It was also clear that many of the remaining factors that lead to uncertainty in local evaluation results could be checked quite easily in the remaining site reports, and that these checks should be made before investing the time required to obtain and process data from the additional sites. Therefore, procedures for assessing the credibility of the impact results were formalized, tried out, revised, and applied to all of the available

field-test-site evaluations. These procedures and the credibility results are described in the following sections.

11.2.2 Development of Credibility Rating Procedures

The impact evaluation component of the bilingual-PIP field test was added to the study, at least in part, because of the intense interest on the parts of USOE and other educators in the impacts of bilingual education. From the beginning of the study, RMC took the position that, due to the controversy surrounding the topic, it was important not to report misleading or erroneous impact results. In practice, this meant validating the accuracy of all results--positive, negative, or neutral--and reporting only those meeting at least minimal standards of credibility. Therefore, for the purposes of this study, ad hoc credibility-rating procedures were established, and these procedures are described here in some detail.

11.2.2.1 Credibility of available information. Ultimately, the credibility ratings were based upon professional judgment, which is to say they were primarily subjective, but considerable effort was expended in making the judgments as systematically and reliably as possible. The first step was to divide the potential threats to credibility into seven categories (Figure 15). The first five categories covered the adequacy of the available information. The ratings in these categories addressed the general question--Is there enough information to produce a credible impact evaluation?

11.2.2.2 Credibility of data analysis. Section II, Data Analysis (the sixth category) addressed the appropriateness of the processing and statistical analysis of the information. For the purposes of this study, it was decided that the analysis should not be rated as any more credible than the least credible category of information (i.e., the lowest value from categories one through five should provide the upper limit for the credibility of the statistical analysis (category six). However, it would be possible to have highly credible information in categories one through five that was analyzed inappropriately. In such cases, the analysis would be rated as less credible than any of the preceding five categories.

I. Data Availability and Quality (Is the required information available?)

A. Student description (SD): language, background, and test-taking skills.

Is the entering language skill and the past experience of the students known? Is there reason to expect unusually high or low scores on pre- or posttests?

0 = no information

1 = informal observation by RMC, or brief description in report

2 = language-test scores, plus some idea of testing experience, previous and current-year bilingual instruction, and home language

3 = detailed analysis of each student

B. Comparison standard (CS)

Is the estimate of how students would have scored without the program precise in relation to the size of the apparent impact on test scores?

0 = no standard, arbitrary raw-score gain criteria, etc.

1 = non-random comparison groups, historical data, norms

2 = state-of-the-art norms plus carefully documented local comparison groups

3 = multiple, high quality comparisons

C. Curriculum versus test-content match (CM)

Is there adequate information on how closely the test content matched the bilingual-program curriculum?

0 = no information or no match

1 = test can be assumed to be reasonably relevant (standardized tests qualify)

2 = relation of test content to specific curriculum is known at a general level

3 = detailed item-by-item analysis related to detailed subject matter analysis

D. Test adequacy (TA)

Are tests technically adequate in terms of reliability, and floor or ceiling effects?

0 = no information, or obvious major flaws

1 = local or criterion-referenced tests without careful documentation of high quality.

2 = documented reliability, minimal floor or ceiling effects. (Major standardized tests qualify.)

3 = Carefully documented quality, plus detailed item analysis, etc.

Figure 15. RMC credibility rating scales for achievement impact evaluations.

I. (continued)

E. Testing and scoring procedures (TP)

Were pre- and posttest administered to identical, careful standards? Is error rate in the data acceptably low?

- 0 = no information; obvious flaws
- 1 = good report from site, some evidence of tester training
- 2 = correct testing procedures observed by RMC for sample of testers. Data appear to be in order
- 3 = RMC monitoring of all testing. RMC monitoring and spot checking of data recording

II. Data Analysis (DA) (Have the data been misinterpreted?)

Includes:

- Are appropriate scales used (e.g., NCEs, no GEs)?
- Are students grouped by language skills?
- Are only students with both pre- and posttest score included?
- Are dropouts analyzed?
- Are analysis models appropriate and correctly applied?

- 0 = raw gains, month-for-month gains, no grouping students, dropouts included in pretest means, any zeros on A-E
- 1 = appropriate model and scale, only students with both pre- and posttests, some indication of language skills
- 2 = same as "1" plus good analysis of student entering skills and background
- 3 = careful documentation of all of "2" plus floor and ceiling effects, matching of (item) scores to instruction, etc.

III. Interpretation of Results (IR) (Were the results due to the bilingual project?):

A. Rationale

Was there a logical reason to expect a gain or loss of the size indicated by the results? The evaluation literature is full of reports of dramatic, one-year gains, but there are few, if any, validated accounts of substantial, long-term upgrading of skills due to special programs. This is true even with dramatically innovative programs that appear to the trained observer to be outstandingly effective. Thus, large gains in generally conventional programs are simply not credible unless they persist over years. The burden of proof is on the exemplary project to show how instruction is different from (and more effective than) instruction in the programs of hundreds of other talented and dedicated educators. Deterioration of performance is more common, but apparent losses should also be examined carefully.

Figure 15. (continued)

III. (continued)

B. Alternative hypotheses

Has every attempt been made to explore and rule out alternative hypotheses as to what was learned and why? Most local reports seize on any positive results as evidence of program impacts, and make no effort to rule out possible alternatives that may be much more credible than are program impacts. Many of these alternative causes are included in the areas listed above. This area includes such possible explanations as: (a) general level of student performance in the school, (b) teaching to the test (which is a form of learning, but one that distorts the meaning of evaluation results), (c) school changes that are not part of the bilingual program, and (d) programs or changes outside of the school.

C. Longitudinal impacts

As noted under "Rationale," a one-year evaluation, especially of a new program, is never highly credible as an indicator of long-term impact.

Combined ratings for Interpretation of Results (IR):

- 0 = negligible change in students' learning environment
- 1 = minor changes in instruction, or strong rival hypotheses
- 2 = substantial changes due to program, and no obvious alternative hypotheses
- 3 = demonstrated links between specific skill improvements and specific instructional treatments; longitudinal data over several years.

Figure 15. (continued)

11.2.2.3 Credibility of interpretations. The final category covers the credibility of interpretations of the results. The credibility of the analysis provides an upper limit to the credibility of the interpretation but, even with adequate information and appropriate analyses, an evaluation was judged to be "not credible" unless a reasonable interpretation of the results was available.

11.2.2.4 Scales for rating credibility. For each category, a four-point credibility rating scale was defined (Figure 14). Although the scales were unique to each category, they all were intended to reflect the following guidelines:

- 0: Evaluation not credible due to lack of information or major problem in this category.
- 1: Problems in this category could quite likely obscure a sizable impact or produce a substantial artifactual impact (e.g., ± 10 NCEs).
- 2: Moderately convincing. Unlikely to produce artifactual effects as large as ± 10 NCEs.
- 3: Highly convincing. Equivalent to a well-executed, laboratory experiment.

11.2.3 Application of the Credibility Rating Scales

As second-year evaluation reports were received from the sites, the information in these reports was combined with information obtained from RMC site-visits. Credibility ratings were assigned by two evaluation specialists working together, then checked with a member of the relevant site-visit team. In addition, eleven sites submitted raw data or detailed summary data, and in many cases RMC was able to improve credibility ratings by reanalyzing or reinterpreting these data. In several cases, a considerable amount of in-depth reanalysis was carried out. The evaluation credibility ratings in four subject areas (grade 2) are reported for in Table 1 for all field-test sites.

Table 1
Credibility of Achievement Impact Evaluations
1978-1979 Grade 2

1. English Reading							
Site	SD	CS	CM	TA	TP	DA	IR ^a
1	No second-grade program						
2	No report received by RMC						
3	1*	1*	1*	2*	2*	1	1*
4	1	0	1	2	2*	0	0*
5	1*	1*	1*	1*	2*	1*	1*
6	2	1*	1*	2*	2*	1*	1*
7	2*	2	1*	2*	2*	1	1
8	2*	1	1*	2*	2*	1	1*
9	1*	1	1	2	2*	1	1*
10	2*	2	1*	2*	2*	1*	1*
11	2	1	1	2*	2*	1*	1*
12	2*	1	1*	2	2*	1*	1*
13	No report received by RMC						
14	1	1*	1*	2*	2*	1*	1*
15	-	-	-	-	-	-	-
16	1*	2	1*	2	2	1	1
17	1	1	1	0	1	0	0*
18	No report received by RMC						
19	0	1	1*	2*	1	0*	0*

3. Math ^b							
Site	SD	CS	CM	TA	TP	DA	IR
1							
2							
3	1*	1*	1*	2*	1*	1*	1*
4	1	0	1*	0	2*	0	0*
5	1*	1*	1*	1*	0*	0*	0*
6	2	1*	1*	2	2*	1*	1*
7	2*	2	1*	2*	2*	1	1
8	1*	1	1*	2*	1*	1*	1*
9	1	1	2	2	2*	1	1*
10	1*	2	1*	2	2*	1*	1*
11	2	1	1	2*	2*	1*	1*
12	1*	1	1	2	2*	1*	1*
13							
14	1	2*	1*	1	1*	1*	1*
15	-	-	-	-	-	-	-
16	1	2	1	2	2	1	1
17	1	1	1	0	1	0	0*
18							
19	0	1	1*	1	1	0*	0*

2. Spanish/French Reading							
Site	SD	CS	CM	TA	TP	DA	IR
1							
2							
3	1*	1	1*	2*	1*	1*	1*
4	1	0	1*	1	1*	0	0*
5	1*	1*	1*	1*	2*	1*	1*
6	2	0	1*	1	2*	0	0*
7	2*	0	1	1	2*	0	0*
8	1*	0	1	1	1*	0	0*
9	1	1	1	2	2*	1	1*
10	1*	0	1*	1	1	0	0*
11	2	-	-	-	-	-	-
12	1*	0	1	0	2*	0	0*
13							
14	1	1*	1*	1*	1*	1*	1*
15	2	0	2	1	1	0	0*
16	1	2	1*	2	2	1	1
17	1	1	1	0	1	0	0*
18							
19	0	1	1*	1*	1	0*	0*

4. English Language Proficiency							
Site	SD	CS	CM	TA	TP	DA	IR
1							
2							
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	1*	1	1	1	1	1	1*
6	2	1	1*	1*	1	0	0*
7	-	-	-	-	-	-	-
8	1*	1	1	1	1	1	1*
9	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-*
11	2	1	1*	1*	2	0	0*
12	-	-	-	-	-	-	-
13							
14	1	1	1	1	1	1*	1*
15	2	0	1	1	1	0	0*
16	1	1	1	1	1	1	1*
17	-	-	-	-	-	-	-
18							
19	-	-	-	-	-	-	-

*Rating is based on information from, or reanalysis by, RMC. A rating based only on the local report might have been either (a) lower, due to missing information, or (b) higher, due to inaccurate information in the report.

^aColumn headings correspond to rating scales in Figure 14.

^bMath was tested in primary language of LEP students at the site.

11.2.3.1 "Impact-evaluation credibility" versus "report quality."

Several points should be noted when reading this table. First, it is the overall credibility, based on all information available to RMC, that is reflected in the ratings. The ratings do not constitute an assessment of the quality of the local evaluation reports. However, it will be seen that many ratings are followed by asterisks, indicating that the reported information was inadequate or misleading, and that the rating is based on additional information available to RMC rather than only that included in the report.

11.2.3.2 Second-grade data. The ratings in the table refer only to second-grade evaluations. While the second-grade programs were new during the second year of the study, we believe that the credibility of the impact evaluations at kindergarten and first grade is even lower, simply because of the technical problems involved in measuring the skills of young children.

11.2.3.3 Site codes. The sites are identified simply by code numbers from 1 through 19. In the interests of anonymity, these numbers were assigned randomly and do not correspond to the ordering of site reports in Appendix A. While all of the field-test-site evaluations include major deficiencies, it would be inappropriate to single out these LEAs for criticism; first, because many of the problems were beyond their control, and second, because, with all of their many deficiencies, these 19 evaluation reports probably exemplify the very best of current program evaluations.

11.2.3.4 Rating levels. No ratings of "3" (i.e., "highly credible") were assigned in any category, reflecting the fact that real-world educational evaluations usually leave considerable room for doubt. Only carefully conducted studies with consistent, longitudinal results are likely to be completely convincing in a school setting. On the other hand, there are several zeroes in the tables. In general, a single zero implies that the evaluation provides virtually no information as to the amount of program impact.

11.2.3.5 Subjectivity. Finally, it must be re-emphasized that these ratings are subjective and are included primarily to give the reader a general sense of where the credibility problems lay. However, while any single rating may be legitimately questioned, we believe that the overall picture is reasonably accurate, and probably applies quite well to most current educational evaluations.

11.2.4 Discussion of Credibility Results

This discussion describes the considerations that led to the credibility ratings for second-grade English reading (Table 1). In general, math ratings were similar. Spanish and French reading, and English-language-proficiency impact evaluations were generally less credible, due to the additional difficulties in finding appropriate tests and comparison groups and the consequently limited effort allocated to evaluating these subject areas in most sites.

- Student description: Only three sites both (a) provided language-test scores and (b) made a serious attempt to provide information on previous student experience. Of the remainder, some provided language-test scores and others provided virtually no information at all. In most cases, a credibility of "1" (rather than "0") could be assigned based on the observation of the students by RMC site visit teams.
- Comparison standards: Most sites were given credit for "1s" because they used tests with national norms. In several cases, the norms were not used in the reports and were supplied by RMC (see asterisks). Two sites had both national norms and comparison classrooms (observed by RMC staff). Based on these comparison classrooms, a credibility rating of "2" was assigned. One site reported only pretest and posttest raw scores using a test that did not have conventional normative data.

- Test-content match. Only a few sites reported any attempts to compare test content to curricula. The ratings of "1*" reflect RMC's judgment that the standardized tests used in most sites were at least generally relevant to the impact question.
- Test technical adequacy. The standardized English reading and math tests are usually of adequate technical quality. In most sites, the levels were appropriate for the second-grade students, and floor or ceiling effects were minimal. Problems with other tests varied from site to site. Few sites discussed these issues at all and only one in any detail.
- Testing and scoring procedures. Based on RMC observations, it did not appear that major problems were introduced by improper testing or scoring. The ratings of "2," however, may be generous for some sites.
- Data analysis: Ratings were limited to "1" or lower by the comparison-standards problems. However, even these ratings were based on RMC reanalysis for most sites, since only a few sites reported gains in any meaningful metric (i.e., standard scores or percentiles).
- Interpretation. Only three of the reports included adequate interpretations of results, and in two of these sites the interpretations consisted primarily of insightful discussions of the problems that precluded credible impact evaluation during the first two years of program implementation. All other ratings in this column are based on RMC observations of the programs and the contexts. The limiting factor was, of course, the lack of information under the first five categories.

Overall, the credibility of the impact evaluations was consistently low. Only one site (number 16) presented somewhat convincing results. In this site, there was substantial evidence that the bilingual programs were having a positive impact on student achievement. The major area of uncertainty was whether the PIP had had a real impact. Because this site

had had bilingual instruction prior to the PIP diffusion effort, there was no way for the evaluator to isolate the effects of the PIP from those of the preexisting bilingual program practices.

In the remaining 18 sites, there was no basis for either positive or negative conclusions concerning PIP impacts on achievement. Many of these sites did, however, provide data that suggested that students in the bilingual programs were making substantial achievement gains, and that some of these were performing very well. While these data do not bear directly on the questions addressed in this study, they are summarized in Appendix D for those readers who may be interested.

11.2.5 The Quality of Local Evaluation Reports

11.2.5.1 Frequently encountered problems. The comments above pertain only to the credibility of the evidence available to RMC bearing on PIP impact. This evidence included the local evaluation reports, data supplied to RMC by the sites, and information obtained by RMC on site visits. Where impact evaluations were given low credibility ratings, this meant that the efforts of RMC plus the local evaluators were insufficient to isolate the impacts of the PIPs from other factors that influence test scores. In a few cases, the credibility of the impact evaluations was low, even though the quality of the evaluation reports was judged by RMC to be excellent.

There is no contradiction in this discrepancy, because the achievement impact question was only one of many considerations in the reports and it was probably the most difficult of all to answer. Evaluation reports serve a variety of purposes (e.g., compliance with Federal regulations, auditing, reporting to LEA decision makers and school boards) and may influence the development of recommendations for program changes. Many of the reports provided documentation of staff development, parent involvement, and some description of program implementation, and thus, would be useful for some of the above purposes. However, with three notable exceptions, these reports, like most LEA evaluation reports, were incomplete and/or misleading to the extent that they were inadequate

for any achievement-outcome evaluation purpose, performance-level assessment as well as impact measurement.

One of the exceptional reports described a well-reasoned design and analysis that did provide some evidence on achievement impacts. A second reflected an exemplary, longitudinal design that should provide impact evidence, as well as other locally useful information in future years, although data were not available in time for inclusion in this report. The third provided an excellent analysis and discussion of the evaluation issues and problems, but problems beyond the control of the evaluator precluded any impact evidence. Two additional reports showed noteworthy attempts to establish appropriate designs that may well produce valuable information in future years.

Problems among the remaining reports included incomplete information about--(a) student characteristics, (b) numbers of students, and (c) tests and levels in use. Many reports also used inappropriate scales such as grade-equivalent scores, and inappropriate evaluation models--for example, simply taking the raw gain from pretest to posttest as evidence of a project effect (Horst, Tallmadge, and Wood, 1975). In fact, some reports reflected major problems in every one of the seven areas discussed in Section 11.2.2.

These problems, however, are not peculiar to the 19 field-test sites or to bilingual-program evaluations. In fact, in our experience, they are typical of all local evaluations of all types of programs, whether conducted by LEA evaluators or outside consultants. We were somewhat surprised by the deficiencies in these reports, because we had known and worked with the evaluators for two years, and knew most of them to be highly competent professionals. In addition, RMC had provided guidelines that, if followed, would have eliminated many of the problems with the reports. The question is--What accounts for the deficiencies in these (and most other) LEA evaluation reports?

11.2.5.2 Possible reasons for evaluation-report deficiencies. In speculating as to the answer, it is essential to keep two key points in

mind: First, the quality of these reports is no worse than average. The quality of most evaluation reports is low. This is not a problem of bilingual education or of these 19 LEAs. Second, the evaluators in most of these sites were highly skilled. In many cases, it is safe to assume that they knew and understood the weaknesses of the reports.

In some sites, there were obvious reasons for the problems (e.g., the evaluators resigning before the reports were completed). In most cases, however, we believe that the reasons were of a different kind, and that they have profound implications for the evaluation of all kinds of federally funded education programs. We believe that at least three factors are involved:

- Lack of evaluator time. Most evaluators had only a few days to do tasks that would require weeks to complete properly. There appears to be a basic lack of understanding of the complexity of evaluation tasks on the part of local and funding-agency personnel.
- Conflicting, inappropriate and impossible demands. Local, federal, and other regulations are often conflicting. In addition, these regulations may call for inappropriate procedures (e.g., grade equivalents) or set unrealistic goals (e.g., impact evaluation). Consequently, the evaluator is often faced with a task that could not be done correctly, even if the time were available.
- Non-use of reports by funding agencies. Site personnel have no indication that their reports are carefully read or that the results are used for decision-making purposes by the agencies requesting the reports.

In summary, it is not surprising that the local evaluator, frustrated by lack of time and impossible demands, and reasonably certain that the report will go unread by any critical, technically sophisticated audience, produces reports that are less than adequate.

12. EVALUATION OF OTHER IMPACTS

12.1 Introduction

The second objective in the RFP for the bilingual-PIP field-test study was to "determine the effectiveness of projects implemented via the PIPs in improving student achievement and attitude" (Section 4.1). While Sections 9-11 address impact on achievement, this section deals with the evaluation of other program goals. The majority of bilingual projects have established goals for staff development, and community involvement as well as for student affective growth. For this reason, RMC staff chose to broaden the study question to include these three major areas.

RMC's role, as stated above, was to provide consulting help to all field-test sites. RMC was then to utilize the evaluations conducted by each of the field test-sites for purposes of the PIP study. After the first-year evaluations were completed, RMC staff reviewed all available reports. In addition to reviewing achievement evaluation procedures, the staff reviewed and analyzed procedures used for evaluating student affective growth, and the staff development and parent/community involvement components. The staff also reviewed the current literature relevant to these areas.

For each area a summary of evaluation methods used by sites was prepared, as well as a discussion of technical issues, and a list of recommendations. These materials were sent to all of the field-test sites in order to encourage the sites to evaluate goals other than student achievement goals and to use measures other than achievement tests.

Specific results in these areas are not reported for several reasons. Some sites did not address these issues, or did so at a minimal level. For those that did address these issues, the evaluation procedures were generally at a developmental stage. Evaluation procedures and methods varied widely across sites. Descriptive techniques were most often employed, and when pre-post measures were used it was not usually possible to determine

the role of the bilingual project in producing the change. So, while the sites were employing standard procedures in these areas and evaluators were probably devoting as much time to these areas as funds would allow, the amount and type of data presented in the reports did not justify a detailed summary of results.

This section is divided into three sections:

- evaluation of affective impacts
- evaluation of staff development
- evaluation of parent/community involvement

Each section consists of two major parts: (1) a brief discussion of some of the technical issues involved in evaluating the area of concern, and (2) a summary of practices employed by the field-test sites. The recommendations that were sent to sites can be found in Volume III, Appendix B.

12.2 Evaluation of Affective Impacts

12.2.1 Technical Issues

12.2.1.1 Specification of goals. Measuring benefits to students in the affective domain is difficult for a number of reasons. First, the goals in the affective domain are often broad and vague. For example, the goal of improving self-concept is open to many interpretations. It is a controversial goal, as well, since it is not clear that bilingual-program students necessarily have low self-concepts, nor is it clear that there is a causal relationship between self-concept and achievement. This goal might be made more specific and more manageable by breaking it down into various components. A program might set a goal that students in the bilingual program will improve their opinions of themselves as successful readers, for example, or as successful math students.

Most bilingual projects have explicit goals for student affective growth. A review of first-year evaluation reports from the bilingual field-test-site programs revealed that the most common goals for student affective growths were to:

- increase awareness of and appreciation for the child's own culture and the dominant culture.
- improve self-concept.

12.2.1.2 Causes of affective changes. Secondly, it is not clearly stated in most proposals or evaluation reports precisely how project features are expected to bring about changes in student attitudes. In some projects it is expected that self-concept will improve "through an understanding of the cultural heritage of both languages" (Venceremos, Project Management Directory, p. 86). For the other projects it is implied that improved attitudes toward self and others are expected to be a result of one or more of the following: (1) accepting and using the language of the child; (2) providing successful learning experiences; (3)

integrating the culture of the child into the curriculum; (4) involving parents in classroom and other activities; and (5) employing bilingual, bicultural teachers who serve as role models. More generally, it is implied that the project as a whole will bring about affective changes in students.

Many sites measured one chosen aspect of student attitudes and reported the results without providing a discussion of the possible reasons for the results. If improvements are expected to be due to one of the project features mentioned above, then a crucial step must be to state whether that particular project feature was implemented. For example, if Venceremos sites expected the cultural component to influence student self-concept, then it would be necessary to describe the nature and extent of the cultural component that was actually implemented. If there was no cultural component implemented, or if it was very minimal, then there is no reason to expect that it affected self-concept. Likewise, if improved self-concept is expected to be a result of the introduction of concepts in the native language, and the latter did not occur, there is no reason to expect to achieve the affective objective. Therefore, sites should report, to the extent possible, which project features, or combination of features, were expected to produce affective changes. They should then discuss to what degree those features were implemented. If they were not implemented, or were improperly implemented, then it is not possible to attribute changes in student affective characteristics to those features.

12.2.1.3 Impacts of meaningful instruction. The very nature of a bilingual project makes it different from other types of special projects in one important way. In most special projects, it is assumed that the normal treatment is meaningful to the students, at least in the sense that they can comprehend the language used in instruction, but that the special project provides a better method of teaching. The situation is different in a bilingual program. The normal, all-English program cannot be "meaningful" (in the sense of the Lau decision) if children are not yet fluent speakers of English. Instruction is meaningful to children only to the

extent that they can understand what is said to them and participate in verbal exchanges with teachers and other students throughout the day.

For this reason, the first question that needs to be addressed by districts in evaluating effects of the project on students is: To what extent are students receiving meaningful instruction? This question can be broken down into other questions such as: To what extent can teachers and children communicate with one another? What proportion of the day is meaningful to children in terms of the degree to which they speak and comprehend the language of instruction? To what extent are children able to relate to and profit from the instructional materials? These are complex questions due to the range of language proficiency levels of children and the inadequacy of measurement techniques. Nevertheless, these immediate benefits to children should be addressed, since, although the affective impacts appear obvious to bilingual educators, they are not always recognized by others. In addition, while the long-range effects of such instruction should show up in achievement test scores, this is not always the case due to short-range evaluation designs, high levels of student turnover, and a variety of other factors.

12.2.2 Affective Evaluation Methods

Evaluating affective changes is problematic since it is impossible to measure attitudes directly. Since an attitude is a hypothetical construct generally considered to be composed of feelings, behaviors, and knowledge or beliefs, it is necessary to choose possible indicators of an attitude, measure these, and make inferences about the attitude. There is a variety of ways in which a district can describe project benefits to students (see Volume III, Appendix B). The number of approaches used and the extent of their use will depend, of course, on time and financial constraints.

Sites that used affective measures made an attempt to locate the best measures available, but the choice of adequate measures (particularly in two languages) is very limited. Most sites used paper-and-pencil, self-report instruments or teacher rating scales. Self-report instruments are

very unreliable for young children since social desirability and events of the moment have a great influence on responses. Teacher rating scales are more likely to be reliable, particularly if several measures are taken longitudinally. A variety of unobtrusive measures can also be used.

One site administered an affective test but did not report results, stating that the test was not valid and reliable. Another site reported results of a locally developed measure, but discounted the results for similar reasons. For future years, if the reliability and validity of locally developed tests are unknown, these parameters should be investigated. If this is not possible, then it might be better to choose commercially available instruments that are technically more adequate.

A number of sites that had stated affective goals employed no measures and reported no results in this area. Of those sites that did address student affect, the most common approaches were the following:

- paper-and-pencil, self-report measures of self-concept, administered pre and post;
- paper-and-pencil, self-report measures of cultural attitudes, administered pre and post;
- documentation of classroom and outside cultural activities offered by project;
- reporting the percentage of students who participated in a given number of cultural events in the classroom.

Other approaches used by at least one site were:

- teacher rating scale to assess students' social behavior;
- teacher rating scale to assess students' school-related behavior and attitudes;

- teacher rating scale to assess student attitude toward self as a bilingual and toward others as bilinguals;
- teacher rating scale to assess students' participation in classroom and playground;
- paper-and-pencil, self-report measures of attitude toward school and toward school subjects, administered 3-4 times during year.

12.3 Evaluation of Staff Development

12.3.1 Technical Issues

12.3.1.1 Primary staff-development goals. The staff development component can be evaluated through a variety of approaches depending on (a) who or what is evaluated, (b) which specific qualities or characteristics are being assessed, and (c) how much time is involved. In practice, most evaluations address only the content of the pre- or in-service sessions, but to assess the value of a staff development program adequately, the effects of training sessions on instructional-staff performance must also be examined. The general goal of staff development is to improve the teachers' and aides' performance in bilingual instruction, and the results can be assessed by answering the following questions: How has classroom performance changed? How have knowledge, skills, and attitudes changed? and How have language skills improved? An adequate evaluation should try to answer all of these questions.

The ultimate benefit of a staff development component should be its effects on the quality of the students' education. It is difficult to measure effects on students and to be able to attribute them to training sessions, but, in some cases, districts may be able to do this. If, for example, teachers attend a session on "Cooperation in Learning Centers," an observer should be able to document the extent to which there is a change in this kind of student behavior over time using a simple observation instrument.

12.3.1.2 Other staff-development outcomes. In addition to assessing effects on teachers, aides, and students, it is possible to evaluate products produced during, or as a result of, training sessions. If part of the inservice program involves materials development, then the resulting materials can be listed, described, and evaluated in terms of their relevance, usefulness, and other features.

Another goal that has been receiving increased emphasis is the upgrading of management and evaluation skills for program staff. Sites may choose to evaluate management and evaluation components in order to provide useful information to improve next year's program.

The term "staff" can be defined as project staff, or more broadly as all district staff, or even more broadly as staff from other districts. If non-project staff are included in in-service sessions, or if they receive information about the project, then the effects of these efforts can be evaluated and discussed. If the practices employed by the project are so innovative or successful that they are influencing neighboring districts, then this is an important benefit of the project.

The time frame for evaluating the staff development component can be viewed in several ways. The content of a workshop, or teacher performance in the classroom can be evaluated for each workshop. Another approach is to look at changes occurring from fall to spring, or from year to year or cumulatively, over the entire length of the project.

12.3.2 Staff-Development Evaluation Methods

A review of evaluation reports from bilingual PIP field-test sites indicated that the most common approach to the evaluation of the staff development component was to:

- provide description and/or documentation of workshops and other training activities that have been provided.
- evaluate the content of the training activities.

The description of workshops and other activities usually consisted of a list and some sample outlines of presentations. In order to evaluate the content of the sessions, most sites had workshop participants fill out a combination rating form/questionnaire in which they evaluated sessions in terms of criteria such as expertise of presenter, relevancy,

clarity, practicality, meeting stated objectives, and meeting needs. The results of these evaluations were summarized across participants and often actual comments made by participants were included in the summary. Several such summary sheets, representing several workshops, were generally included in an appendix as examples. The results were then summarized across several or all sessions for the year and the conclusion reached was often something like "With one exception, all workshops met their objectives and provided useful, practical information for teachers." The majority of sites evaluated their staff development component at this level.

A number of sites employed additional techniques, including the following:

- a needs assessment administered in the fall.
- pre- and posttests on content of workshop administered to participants at each workshop.
- classroom observation.

12.4 Evaluation of Parent/Community Involvement

12.4.1 Technical Issues

12.4.1.1 Context. To a large extent, the success or failure of a program is determined by the contextual features that characterize it. Parent/community (P/C) support of a bilingual education program can be a great asset throughout program implementation and operation. For this reason, it is important to document and report the type of community support a program receives throughout the various stages of program development (planning stage, implementation). The amount of support a program receives initially can be a predictor of the type of support it will receive throughout its life, unless some community features change dramatically. Once the schools where the program will be housed are selected, some historical data should be collected to document the extent of P/C support that existed prior to the program's inception. This information can be used as a comparison in documenting the change in community support over time.

12.4.1.2 Objectives. A second important step is to develop realistic, meaningful, short-term and long-term objectives which will define the expected school-community relationship. P/C participation in setting these objectives is essential, since it will outline the P/C commitment to the school as well as their expectations of the school. It is essential to ensure that minority P/C participation will occur, since this is the target population of the bilingual education project and since compliance with federal guidelines is a goal in itself.

12.4.1.3 Activities. A third step is to plan processes and activities that will produce the desired outcomes specified in the goals. The formation of a PAC, production of an activities calendar, and formation of standing committees (for hiring, curriculum, evaluation, etc.) are examples of processes that will achieve some of the short-term goals specified. Parents' actual participation in the classroom, and preparation of cultural instructional units by parents, are examples of activities that may contribute to achieving some of the desired long-term goals.

A fourth step is one that was addressed by most field-test sites. This is to document the array of activities that take place throughout the school year and are of significance to the school-community marriage.

12.4.2 Parent/Community Evaluation Methods

A review of the field-test sites' evaluation reports showed that the most common approach to evaluating the community component was documentation of events. Whether or not changes came about because of parent/community participation was often not addressed. In most reports, little or no attention was given to examining the effects of this component on the schools, the students, or the communities themselves. The following evaluation approaches were by far the most common:

- reporting attendance at parent advisory committee (PAC) meetings, presenting minutes, and listing accomplishments;
- describing parent workshops and parent education sessions, and reporting attendance;
- documenting efforts to disseminate information about the school and the project to parents and community;
- documenting home visits by staff and parent/teacher conferences.

A limited number of sites employed additional evaluation techniques, including the following:

- using a pre-post questionnaire to measure parents' gains in knowledge of bilingual education, and attitudes toward the program;
- documenting parent activities in the school (as tutors, field-trip supervisors, etc.);

- listing products of parent/community workshops (instructional games, cassette recordings, newaletter, etc.);
- administering parent questionnaires to assess parents' perceived value of their participation in school activities;
- administering parent questionnaires to assess whether or not information was received about the projects and about project evaluation;
- administering a questionnaire addressed to the PAC to assess strengths and weaknesses of the bilingual-education project;
- conducting a survey to assess child's home language use.

13. CONCLUSIONS, RECOMMENDATIONS, AND PRODUCTS FROM THE IMPACT SUBSTUDY

13.1 Apparent Impact as a Criterion for Selecting Exemplary Projects

The first conclusion to be drawn from the Impact Substudy is that the apparent impact of a project on student achievement is not a sufficient criterion for selecting projects or practices (bilingual or other) for diffusion. The study reemphasized the finding from previous PIP studies that apparent impacts of exemplary projects are confounded with factors related to the contexts in which the projects operate, and with problems in the impact evaluations. Further, even if legitimate impacts attributable to a project could be demonstrated, the project features may not appeal to target LEAs.

In lieu of demonstrable impacts on student achievement, it seems reasonable to identify projects and practices that are judged especially effective by the teachers and other personnel involved, and to disseminate information about these projects and practices to target LEAs. However, the experience of the PIP studies and other diffusion studies is that (a) it is very difficult and costly to get target LEAs to replicate exemplary projects closely, and (b) given the characteristics of most exemplary projects, there is no justification for requiring replication. (In some cases, it seems clear that replication of certain features would be harmful.) Before deciding that a specific project or practice is of sufficient value to justify accurate replication (and the expense of the diffusion system required to obtain accurate replications), the value of the project or practice should be confirmed through a program of rigorous research.

In short, it is reasonable to select for dissemination any ideas that may be of use or interest to educators, provided that the cost of dissemination is not too high. By contrast, the cost of an effective diffusion system will almost certainly be high. Perhaps of even more concern is that the agency that attempts to impose specific practices on a school

district assumes a very serious responsibility. It is not clear whether any existing practices truly warrant a major diffusion effort, but it is completely clear that the selection criteria for such practices would have to go far beyond "apparent impact" in developer sites.

13.2 Achievement-Impact Evaluation as a Measure of Diffusion-System Effectiveness

The achievement-impact evaluation described in the above sections represents only one limited form of program evaluation. It is a very difficult form of evaluation and, from the perspective of the LEAs, it is not necessarily the most important form.

Ultimately, of course, achievement-impact evaluation is the only way to assess the effectiveness of a diffusion system that is intended to improve student achievement. Unfortunately, given the current state-of-the-art, achievement-impact evaluation (for bilingual and perhaps most other kinds of programs) is impossible in most school districts. In order to produce credible achievement-impact evaluations, a school district would need to establish and maintain a data base that included test scores and biographical data for all students in all subtest areas of interest. Given such a data base, when a particular group of students was given a new special treatment it should be possible to see the effects, if any, on program-student test scores by comparing their scores before and after the introduction of the new program to the background made up of the scores from all non-program students.

Some school districts are attempting to develop such data bases and, in the future, achievement-impact evaluations may become feasible in a much wider variety of districts. In the meantime:

- Field tests of diffusion systems should employ process evaluations designed to determine whether or not the intended practices are implemented.
- The assessment of achievement and other impacts should be determined under carefully controlled conditions in carefully selected school districts. Before undertaking such assessments, implementation of the practices and availability of appropriate comparison data should be assured. Due consideration for the generalizability of the results should also be required.

13.3 Broader Implications for Program-Evaluation Requirements and Guidelines

The frustration on the parts of the local evaluators in their attempts to develop credible impact evaluations reflected the impossibility of meeting many of the Title VII requirements in any meaningful way and the conviction that the evaluation reports would never be used by the funding agency. As a result, RMC recommends that evaluation requirements by federal agencies (and state and local agencies, as well) be reconsidered in terms of whether:

- The requirements can be met.
- The results will be used.

Once it has been established that the evaluations are needed and are possible,

- Adequate guidelines should be developed
- Adequate funds should be provided
- Adherence to sound procedures should be required

In particular, consideration should be given to--(a) establishing long-term data collection and storage procedures, and (b) the reporting of longitudinal data on a less-than-annual basis.

13.4 Substudy II Product: A Preliminary-Draft Evaluation Manual

The major product of the impact substudy is a collection of guidelines and worksheets developed by RMC for the field-test sites during the study. These materials represented an attempt to solve the evaluation problems in the various problem areas discussed above. The guidelines and worksheets were subsequently organized into a preliminary-draft evaluation manual dealing with performance-level and impact issues. The manual does not cover process evaluation, monitoring of student progress and other important evaluation topics.

The preliminary draft manual emphasizes realistic solutions (or partial solutions) rather than general or theoretical principles. It is intended as a starting point for developing a set of highly specific and practical guidelines for generating useful, local evaluations of student achievement in bilingual programs. Such a manual could be used together with a process evaluation manual to develop a complete bilingual-program evaluation. The draft manual is Volume III of this report.

APPENDICES

APPENDIX A

ADOPTER-SITE RESULTS

ADELANTE - SITE A
PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. Site A is a large district in a city of 158,000. The district had 25 elementary schools and a complement of middle and high schools. Of the total student enrollment, blacks and Hispanics comprised 50% and 30% respectively. Ten of the districts' elementary schools have an entirely non-white student enrollment. The city's Hispanic population quintupled from 8,500 to 40,000 in four years and was still growing. Hispanic enrollment increased by 25% during this period, to an estimated 5,000 students of which only 2,000 were previously receiving bilingual-, bicultural instruction.

Overview. Site A decision makers, from the superintendent on down, were supportive of bilingual education. The second year the district hired a new superintendent who was himself bilingual. The district had a highly regarded Title VII program for a full funding cycle. In addition, bilingual services were available in the district (K-12) and were supported by district funds. Adoption of the Adelante project was an attempt to extend bilingual services to some of the three thousand LEP students identified by the state testing program and not receiving special services.

Project start-up was delayed for several months into the school year due to a district-wide hiring freeze. The project was implemented in some second and third grade classrooms, in addition to grades K and 1 as proposed for Adelante PIP sites, and the project expanded to fourth grade during the second year.

Decision makers. One of the decision makers (DMs) is district director of bilingual education and is Puerto Rican. The experience of the DMs include previous Title VII program administration, state testing of LES children, settling a suit brought by the community and complying with

Office of Civil Rights (OCR) guidelines, and a district-supported bilingual education program. The school board also had minority representation, had created the position of bilingual education director, and had passed a resolution supporting bilingual education. Because of this previous experience with bilingual education, DMs had little trouble understanding and accepting the new project and fitting it into the existing organization. The DMs learned of the bilingual PIP projects through their involvement in Title I PIP programs. They perceived that adoption of a PIP project would enhance their opportunity to obtain the additional funds needed to expand their bilingual education program. They were able to see the ASK and a complete Adelante PIP before writing their proposal. Adelante was regarded as the most appropriate PIP; one reason was because the Laidlaw series recommended in Adelante was the main series used in Puerto Rico and a number of district students migrate between both school systems. Also the Adelante curriculum was general enough for the project to be easily incorporated in the district's fairly well developed bilingual program. However, DMs were critical of certain PIP-recommended practices and adapted them to fit local needs. These adaptations concerned one of the program goals stated in the PIP and the number of aides to be hired for the project. The DMs were already well informed and it was relatively easy for the project director (PD) to develop good communication. The project ran smoothly as far as the DMs' policies and activities were concerned.

Project director. The PD was a district employee who was well acquainted with district personnel and practices, and with the existing bilingual program. She was bilingual and Hispanic, had course work in bilingual education, and had taught, been a team leader, and a language specialist in the district's previous Title VII bilingual program. She had minimal administrative experience, was hired late, and was not acquainted with the proposal or the PIP. The district director of bilingual education helped to orient her, and, as a result, the effect of these weaknesses was minimized. The PD's office was located at the district office, which she saw as important in establishing her administrative role. However, the second year the PD's office was moved to another

district building because of overcrowding. The office location continued to be satisfactory. She was not allowed to hire an instructional consultant (IC) directly because of district policy, but her recommendation was considered in the selection of an IC. The PD worked effectively at all the tasks and formed a good decision-making team with both the district director of bilingual education and the project IC. Although more of a team approach than envisioned by the PIP, this style proved effective and appropriate for this district. Since this district already had a bilingual education program, the definition of roles and basic components of a program as outlined in the PIP was useful mainly as a checklist. The Adelante emphasis on grouping and the use of learning centers was adopted by the PD and implemented in the classrooms.

Project support staff. The IC had previous experience teaching in a bilingual classroom, and was well informed about bilingual and elementary education. She was able to develop good working relations with the Ts most in need of additional assistance. During the first year, the IC and evaluator were hired late since the whole program started late. For the second year, a community consultant position was added. This full-time position was a modification of the PIP-specified second IC in that the person was not required to have college credentials; however, she was bilingual and Hispanic. The Adelante support staff received assistance and consulting from district-level bilingual and evaluation staff. The evaluator also was influenced by a Ph.D. program in which he was enrolled.

Project instructional staff. During start-up no new teachers (Ts) were hired for the project; existing Ts were bilingual and had bilingual education training or experience. As the first year progressed, severe overcrowding in one classroom made an additional teacher necessary. Finally one was hired, but had to work in the same room because no extra classroom was available. During the second year, additional project teachers were hired due to replacement and expansion of the project. With one exception, all additional/new project Ts were bilingual; the monolingual T was teamed with a bilingual T.

During the first year, three of the teacher-aides (TAs) were monolingual, but for second year all TAs assigned to project classrooms were bilingual. During the first year, Ts and TAs received a pre-service workshop modeled on Adelante PIP topics, but due to the project's late start, it was compressed into six days instead of ten as recommended by the PIP. The workshop, prepared by the PD and IC, used district and TRC bilingual expertise. Ts and TAs attended in-service on a voluntary basis. In-service workshops were offered by Adelante staff, by the district department of bilingual education, and by the SEA. Ts and TAs were also encouraged to enroll in college or adult education classes; one T was a former TA who had completed college with district encouragement. Toward the end of the first year, they were able to suggest topics, however, some Ts felt the in-services were too elementary and should be designed to meet individual needs. Prior to the beginning of the second year, all Ts and TAs participated in a two week pre-service workshop which covered general orientation topics and allowed the Ts and TAs planning and working time in their own schools. Second year in-service was conducted by the PD and support staff. It included a session in which Ts and TAs planned future staff training and one optional reading workshop, as well as several required training sessions.

Other personnel (regular staff, community, parents). The teachers' union had opposed bilingual education several years previously, but was currently officially accepting the rationale for bilingual education. Experienced monolingual Ts were being dismissed while the district was recruiting bilingual staff; one teacher had brought suit against the district, but no settlement had been reached. The regular teaching staff had not been formally oriented to the Adelante project, but the whole district had access to workshops on bilingual education. Project school principals were given the choice of accepting or rejecting the project at their school, however, a range of attitudes towards the project existed. One principal was very helpful, yet another of the three discouraged parents from coming to the school. The principals were kept informed about the project by frequent visits from the PD and the IC.

The community was active and organized. In the past, parents had picketed certain schools and attended key school board meetings. A few years ago parents and ethnic community organizations brought a class action suit against the district and OCR also brought suit. The parents' case was settled by a consent decree that also included OCR remedies. A Puerto Rican had been serving as school board member for several years. Some schools encouraged parent participation to the extent of reserving lounges exclusively for the use of parents. During the first year, about 20 percent of the Adelante project parents attended school or project activities, and about four percent helped in project classrooms. During the second year, only about 10 percent of the parents were active in daytime school events. Parent Advisory Committees (PACs) met monthly at all three project schools, and parents had input into the continuation proposal. English classes for parents were attempted and dropped but the project staff did serve as a link between project parents and community services such as adult education.

Other resources (materials/equipment, facilities, funds). Spanish-language materials were already available in the district due to other bilingual projects, but more were needed and ordered. Ts were not required to use PIP-recommended materials exclusively, but were given their choice --possibly due to the district's experience with a wide range of materials. Some of these materials were already in use in the district. However, each school limited itself to one English basal, and the choice of Spanish readers was limited to two or three series district wide. The district interpreted federal regulations strictly and would not buy anything in English with project funds. Overall, the PIP had a minimal impact on the selection of project instructional materials. The project was adequately funded, but the district itself was in a period of financial difficulties. Therefore, project classes were short of basic supplies. Some project funds were spent for basic items, and some Ts also used their personal funds to supply their classrooms. A district hiring freeze during the first year also caused hiring delays, which then delayed start-up of the whole project. Project classrooms were not adjacent as called for in the

Adelante PIP because whole classrooms already in session had been assigned to the project. After some effort, Ts did follow PIP suggestions to arrange their rooms in learning centers and to create exhibits in both languages. Towards the end of the first school year, one classroom became severely overcrowded and the addition of another T helped the instructional, but not the space problem. During the second year adequate classroom space existed. During both years the PD and IC had adequate office space.

Plans and constraints. DMs saw both the ASK and the Adelante PIP prior to writing the proposal. They liked the vagueness of the PIP as it related to instruction because this enabled them to use their own curriculum and to incorporate the district objectives into the Adelante project. The PD and the IC used the PIP extensively during start-up. Pre-service instruction, for example, was modeled upon PIP suggestions. Ts did not use the PIP, although it was distributed to them. As time went on, the PD and the IC referred to it less. The district was subject to many regulations that were not always consistent although they affected the same students; the district responded by following the most stringent regulations. During the first year, the state was testing all LES children and a Title I ESL program also required language testing, so the Title VII project made use of the same test in order to avoid overtesting the children. The district was legally required to work toward OCR compliance and had to report quarterly. Some Office of Bilingual Education regulations such as organizing a Parent Advisory Committee, or using 15 percent of the funds for staff training, were easy to follow. However, the requirement not to segregate was difficult in a district that was already having problems in this area. All the various testing plans affected the Title VII project's choice of tests, and it was virtually impossible to establish a no-treatment expectation as required by the regulations.

Students. Hispanic and Black students made up the majority of the school population. Virtually all students in project classrooms were LES and of Puerto Rican origin. There was a high degree of mobility and new students enrolled throughout the year, some of them coming directly

from Puerto Rico. Project classrooms were selected from schools that had a high proportion of LES students and limited bilingual services, though all first and second grade project classrooms participated in a Title I ESL pull-out project. There were more eligible students than the project was able to serve. As a result of the project, the Ts had more training and greater access to an instructional consultant. They also had extra money for materials and supplies. The Adelante PIP did not influence classroom staffing patterns since full-time aides already existed in all early elementary grades.

Instructional treatment. District policy required a full-time aide in all kindergarten, first, and second grade classrooms, while the PIP only called for a part-time aide beyond kindergarten. The aides were assigned an instructional role in the classroom, but because of large classes and scarcity of materials in some areas, a completely individualized system of instruction was rarely possible. Grouping occurred in some but not all classes. The main effect of the project on the students was to provide instruction in Spanish and to organize learning centers in classrooms. All kindergarten instruction was in Spanish. First and second grade students received increasing amounts of ESL instruction, but English reading was not commonly begun until third grade. About half the students were pulled out for a thirty-minute Title I ESL lesson. Teachers used a variety of Spanish and English materials. A Spanish color-coded reading system (LeoColor) was widely in use. The first year there were six classrooms with kindergarten and first grade project students located in three different schools. During the second year there were three kindergarten, five first grades, and three second grade classrooms. Additional first grade classes were added because student enrollment increased at this level.

First grade students received eighty to one hundred minutes of Spanish reading and language activities daily of which forty to fifty minutes formed the core reading program. They had twenty to forty minutes of math and twenty to forty minutes of ESL. Second grade students received sixty

to ninety minutes of Spanish reading and language, of which about forty minutes formed the core reading program. They had thirty to sixty minutes of math, thirty to fifty minutes of ESL, and thirty to forty-five minutes of science or social studies. The schedules of students who were pulled out for ESL varied slightly.

ADELANTE - SITE B
PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. Site B is a consortium of five small LEAs surrounding a major metropolitan area. The LEAs vary in size from 30 to 250 square miles, and in enrollment from 461 to 949 students. Three of the LEAs had only one elementary school while the remaining two LEAs each had two elementary schools. The Spanish surname enrollment at these schools ranged from 10 to 24% of the total enrollment.

Overview. This project--a consortium of five school districts--was managed by a State Education Agency (SEA) service center. The consortium structure greatly complicated administration of the project. Each LEA had different policies, procedures and calendars as well as slightly different student populations and needs. The distances between districts were great and travel consumed a great deal of some of the project staff's time.

Decision makers. There were two layers of decision makers (DMs) in the consortium: the SEA service center DMs and the DMs at each of the five participating LEAs. One of the goals of the SEA service center was to increase service to LEAs needing help with bilingual education and the Adelante PIP provided a way of doing this. The service center DMs were not bilingual/bicultural and assigned their in-house bilingual consultant to write the proposal. This consultant attended a Title VII proposal-writing workshop jointly sponsored by the SEA and the regional training resource center, (TRC) designed to assist LEAs in applying for Title VII funds and to introduce the PIP materials. The ASK and the Adelante PIP were available to the proposal writer. The proposal writer subsequently became the project director (PD) and kept the DMs informed throughout the project. The SEA service center staff was well organized and the project started on time.

One of the four initial LEAs withdrew from the consortium before start-up because it was unwillingness to make the required changes. However, the PD was able to add two additional LEAs, for a total of five LEAs. The LEA DMs were not bilingual/bicultural and, although they all had been required to comply with state bilingual education regulations and were receiving state money, four of the five districts had almost no knowledge or resources in this area. The project provided the DMs with a convenient method of complying with existing state regulations, so most of them had positive attitudes. The LEA DMs were kept informed through bimonthly meetings with the PD and support staff.

Project director. The PD was bilingual and Chicana; she had been the bilingual consultant at the SEA service center that subsequently administered this project. She was well acquainted with bilingual practices, the LEAs' needs, and the service center organization. As the author of the proposal, she was thoroughly knowledgeable about the PIP and the project at the time of start-up. She had no previous management training yet functioned effectively in her new role. A lot of management skills acquired in her consultant job were transferrable to the PD job. She hired support staff, clarified roles and responsibilities and engaged the staff in joint planning, yet she had some trouble working with the project evaluator. She liked the management aspect of the PIP projects and felt the staff development component was attractive to LEAs. It appears that the PIP project was also seen as a means of getting funding. Although the PD read and consulted the PIP, much of the PIP management plan was not applicable to the consortium structure of this project.

Project support staff. The PD hired support staff in time for start-up and clarified job assignments. Two full-time ICs were hired for the first year due to the extra driving time and coordinating difficulties inherent in a project with five LEAs. Both ICs were bilingual; one IC was Anglo, the other was Cuban. Both ICs had previous experience and appropriate training in bilingual education. The work of the ICs was well coordinated to take advantage of the time and special skills of each person. Though they used the PIP as a checklist and as a source for ideas,

they found that issues such as selecting materials with limited funds or working with monolingual project Ts were not clearly discussed. The project evaluator was bilingual, Chicano and experienced in bilingual education evaluation.

Project instructional staff. During the first year, eight of the ten project teachers (Ts) had state bilingual certification; the remaining two Ts were not bilingual. All the teacher-aides (TAs) spoke Spanish, but one TA was not a native speaker and was not very fluent. During the second year, 16 of the 20 project Ts were considered sufficiently bilingual by the PD and ICs. Ts were selected for the program by their principals and districts. During the first year, one more T was needed at one school and, though the position had been advertised, no bilingual Ts could be found. This situation was corrected the following year. When an overcrowding occurred in another LEA, a second T placed in one classroom for the latter part of the school year. This resulted in overcrowding of the classroom, making group work difficult and individual attention almost non-existent. Some of the Ts were hired especially for the project. The first year one district hired project TAs late, however student Ts in project classrooms were performing TA functions at no cost to the district. During the second year, one class had no TA for part of the year. In one LEA during the first year, the bilingual Ts acted as resource Ts and moved between kindergarten and first grade, creating in effect a part-time bilingual program. During the second year, Ts had responsibility for combination classrooms encompassing two grade levels. In another LEA, Ts were organized into teams consisting of a bilingual T and monolingual English T. Students were exchanged between these classes. During the first year, Ts and TAs from three of the LEAs received a two-week preservice workshop; the two other LEAs had not yet joined the consortium. All the project Ts and TAs received in-service training conducted by project staff and consultants once a month the first year and bimonthly the second year. All the teachers received orientation on the PIP manuals, but not all read it. Most liked the PIP-recommended materials, classroom visits by the instructional coordinator (IC) and the workshops, but some Ts preferred to use their own texts and methods. Some project features were

less relevant to the two Ts who were extremely limited in Spanish. Although, some Ts visited each other's classrooms, the geographic distance between participating LEAs made close teamwork difficult.

Other personnel (regular staff, community, parents). There was no orientation by the project staff for the regular school staffs, and the attitudes varied across LEAs. One district had a principal who volunteered for the program, took Spanish lessons, addressed a PAC meeting in Spanish, and developed staff enthusiasm for the project. The second year, this principal's enthusiasm waned somewhat and there was little support for the use of Spanish in second grade. Another principal who had monolingual Ts in project classrooms was not enthusiastic about following project guidelines. A third principal did not follow state regulations for bilingual education. Principals participated in the bimonthly meetings with the PD and ICs. Several LEAs had bilingual Ts who shared students with regular Ts, and engaged in joint planning. However, a project T and a regular T who shared a classroom communicated very little despite an absence of physical barriers. Each taught their own students exclusively.

Before the project was installed, there had been little involvement of parents or community in school affairs. For the first year, two LEAs had good attendance at their school project functions, and had some parents assist in the classroom. The other three LEAs had less success, partly because of distance problems for the parents. The large distance between the consortium LEAs also made it difficult for project staff to establish community ties. Parent participation greatly improved by the second year, partly because one IC was assigned to work exclusively with parents. Several parents from each school were elected and a consortium-level PAC meeting was held, but this was not practical due to the distance separating the LEAs. There were no negative responses to the program.

Other resources (materials/equipment, facilities, funds). The PD and ICs ordered materials suggested in the PIP and distributed them to the classrooms. During the first year, their inexperience resulted in

too much money being spent in some areas so that no funds were left for others. The first year, ICs encouraged all project Ts to use the same core texts, but because materials arrived late, it was difficult to get some Ts to change in mid-program. The second year, the project staff emphasized standardizing objectives rather than standardizing texts. Only about one-third of the texts used were PIP-recommended, yet all five LEAs used the same PIP-recommended Spanish reading basal. Some materials were developed by Ts during in-service. Facilities varied enormously across LEAs--some were very modern and well equipped and one was quite old and lacked air conditioning, which was a handicap in this climate. The amount of funds varied across districts, so some Ts were better equipped than others. Project funds were adequate the first year, but were not increased the second year in spite of vertical expansion to another grade.

Plans and constraints. The Adelante PIP was not very appropriate for a consortium project, however project staff made a reasonable effort to follow it. State law required bilingual education in grades K-3 if certain conditions existed, yet it provided little money and inadequate consulting services to put this in operation. The state also had exit criteria but students were exited earlier in some schools. The project was seen by DMs as a way of complying with state regulations. As part of the project plans, the ICs engaged in detailed planning of bilingual curriculum and the writing of instructional objectives, although this was not specified by the PIP. One of the LEAs had a busing schedule during both years that greatly limited the classroom time of some students.

Students. Most students in project classrooms were LES, and the student population was relatively stable. In some districts, students who qualified for the program were bused to one school to comprise a class. In these schools, there were few Chicano children outside the project classes. Project classes in one LEA were ethnically mixed. In another LEA the bilingual teacher functioned as a resource teacher for about half of the instructional day; in the absence of the resource teacher, classes were mixed. In the other three LEAs, project students joined other students only for art, music and physical education.

In three LEAs, instruction in Spanish and Spanish materials were available to LES students for the first time through the Adelante project. In one LEA even with the project, little Spanish instruction occurred. Another LEA already had Spanish instruction and materials so the role of the project was supplementary. This particular LEA also had TAs in the past, but for the other four LEAs, the addition of TAs to the classroom was a major change made by the project. The involvement of the parents, the visits of the ICs, and the extra training received by Ts may have affected classroom practices also. Students placed in the project were those qualifying for the state bilingual education program; the LEAs were chosen because they qualified for state programs but lacked experience and resources needed for implementation.

Instructional treatment. Site B is a consortium of five districts with enough differences in instructional treatment to warrant individual discussion. The project staff developed objectives, which were available to teachers in all five districts. All teachers participated in the same in-service training. During the first year the project consisted of six kindergarten and six first grade classes. The second year there were six kindergartens, seven first grades, and eight second grades; the uneven numbers were due to team teaching and mixed grade classes.

District A

The first year district A had two kindergarten and first grade classes at two schools; the second year each school added a second grade. Because there were only two project teachers per school, the kindergarten and first grade students were combined, and sometimes the kindergarten and second graders were also in the same room. There were between ten and twelve students in each grade. Both second grade teachers were replacements for the original teachers who left a few months before the end of the 1978-79 school year. The aide in the second grade class was only present part of the year. All the teachers and aides were bilingual and Chicana, except for one of the second grade replacements. The aides participated in the students' instruction.

Reading was grouped and math was individualized. By the end of the school year, almost all instruction at the second grade was in English. The classrooms had listening and activity centers. Some oral English development was done by non-project teachers.

First grade students received between ninety and one hundred and ten minutes of Spanish reading. Most also received thirty minutes of English reading although a few were in oral English only. All first grade students received forty minutes of oral English. Math, which was taught increasingly in English, varied between the two first grades from forty-five to sixty minutes. The second grade students were not receiving any Spanish reading instruction by the end of the year. English reading and oral language development was about seventy minutes, with forty minutes of that time devoted to the basal series. Math varied between the two classes from forty-five to eighty minutes a day.

District B

The first year district B had one kindergarten and one first grade. The second year a second grade class was added, and because of the size of the first grade class, an additional teacher was hired for the last half of the year. All teachers and aides were bilingual and all except one were Chicano. The aides were part of the instructional team. Students were grouped for each academic subject.

The first grade made daily use of an oral language development program in both Spanish and English (Let's Learn Language). At the second grade, most instruction was in English.

The first grade spent seventy minutes a day on Spanish reading and ten students spent one hour daily in English reading. First grade students also received math instruction in Spanish for one hour daily. The second graders received Spanish reading instruction for the first three months. All second grade students had forty minutes of English reading and additional English oral language development. They received one hour of math in Spanish.

District C

The first year district C had one kindergarten and one first grade class. The second year the first grade became a combination first and second. Second grade students participated in the bilingual program only in the morning and went to various homerooms in the afternoon; first grade students were in the program all day. The first year teacher aides were hired late because of the presence of student teachers. All teachers and aides were bilingual. During the first year neither teacher was Chicano but the second year there was a Chicana teacher. Students were grouped for reading but not for math.

Some students were pulled out for the state compensatory education program and for Title I reading lab. Oral language development and ESL were part of the curriculum. All first grade students began English reading at mid-year. There was very little Spanish reading at the second grade level.

First grade students received fifteen to thirty minutes of Spanish reading depending on their grouping, and forty-five minutes of English reading for the last half of the year. They also had forty-five minutes of ESL and forty-five minutes of math. Second grade students received sixty to ninety minutes of English reading and twenty to thirty minutes of oral English. They had thirty to forty minutes of math and no scheduled time for Spanish reading.

District D

The first year the bilingual project at District D consisted of one kindergarten, and two first grade classes; two second grades were added the second year. Because of a stable population almost all first and second grade project students had also been in the project the previous year. Seventy-five percent of project students were bussed during school time, at a loss of seventy minutes of instructional time. The project

classes integrated with other classes for music, art, and physical education.

The language of instruction was English on Monday, Wednesday, and Friday, and Spanish on Tuesday and Thursday. The previous year, three days a week had been devoted to Spanish, but district administration was placing increasing emphasis on English.

First grade students had fifty minutes of Spanish reading of which fifteen were devoted to the basal reader, seventy minutes of English reading of which twenty were devoted to the basal reader, and thirty-five minutes of math. First grade students began English reading after some time in oral English and continued to receive ESL instruction. Second grade students received fifty minutes of Spanish reading, seventy minutes of English reading, and seventy-five minutes of math. All second grade students began English reading at the mid-year point.

District E

The bilingual project at District E consisted of one self-contained kindergarten class, and two first and second grades using a team teaching model. Aides were assigned a clerical and support role in some of the classrooms. In most classes students were grouped by ability. Students were exchanged between teachers for team teaching purposes and also for integration. Although some teachers knew a little Spanish, including one teacher in each team, the project director and staff did not consider any of these teachers truly bilingual. None of the teachers were Hispanic, half of the teachers were black and half were white. The aides also were not bilingual, although during the first year the aide spoke a little Spanish.

Spanish reading was taught with a basal series in first grade and with programmed materials in second grade. Math was taught primarily in English. Many readiness skills commonly taught in kindergarten were taught at the first grade. Most second grade students were pulled out for an additional Title I reading lab.

First grade students received thirty to forty minutes of Spanish reading and forty-five minutes of math. Only a very few students were reading in English, but the rest had one hundred and fifteen minutes of ESL and oral English language development. Second grade students had sixty minutes of Spanish reading, sixty minutes of English reading and an additional thirty minutes of oral English language development, and forty-five minutes of math. Second grade students began English reading three months into the school year. Criteria for beginning English reading was a 1.2 level of Spanish reading and oral comprehension of basal vocabulary.

ADELANTE - SITE C
PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. Site C is a large district located in a medium-sized city with LES students making up a small percentage of the total population.

Overview. The Adelante project at this site was plagued by administrative and organizational problems that adversely affected the project. The Adelante Title VII project was designed to take over the state program one year at a time and required close coordination between the two projects. During the first year, the directors of both projects, their immediate supervisors, and the principal of the project school seemed incapable of working together. The chain of command was unclear, and decisions were frequently inconsistent. Decisions about the project were frequently made by the principal or another administrator. As a result, it was almost impossible for the Adelante project director (PD) to manage the project effectively. During the second year, the Adelante PD and the director of the state program were both new and worked cooperatively. However, problems with the principal and the chain of command continued. As a result, the state program director, who was in charge of the entire districts' bilingual program, including the Adelante project, resigned at the end of the second year.

This site had a half-day program at the first and second grade level. Students were in project classrooms in the morning and then separated into different non-project classrooms in the afternoon. The PIP did not lead to the development of detailed curriculum; this was mainly because of the many other problems encountered by the project.

Decision makers. None of the district decision makers (DMs) were bilingual/ bicultural. They were fairly well informed about funding sources. The director of specially funded programs (DSFP) wrote the proposal and contacted PIP diffusers, although her initial information about bilingual

PIPs came from a State Facilitator with the National Diffusion Network. Although a state bilingual project had existed in the district for five years, DMs wanted to use federal money and the PIP to improve a project that was not considered successful or popular with parents. DMs planned to have the Adelante project supplant the state project a year at a time, but the organizational consequences, especially for the respective project directors (PDs), remained unclear. Because only the ASK and not the actual Adelante PIP was available to them at the time of proposal writing, the local DMs did not know the details of the project they were agreeing to adopt. In addition, implementing the project in detail was not the main concern of local decision makers. They saw the PIP as a means of getting funds and as a means of improving the existing program.

During the first year the state and federal programs reported to different supervisors, making program cooperation difficult. An attempt to have one director for both bilingual programs was abandoned because OBE required Adelante to have its own PD. During the second year an attempt was made to have both programs follow the same chain of command but confusion of functions persisted. The DMs did not select a PD either year who was knowledgeable or experienced bilingual education at the elementary level. During project start-up, the district was under a state mandate to desegregate and the DMs decided to move both bilingual projects to a previously all-white school in order to improve the ethnic balance of the student population. As a result, the Adelante project did not get off to a strong start. Some old project staff resented the new project. The move to a new school isolated the project from its target community, and because the DMs perceived the project in terms of a quota of minority students, the principal was reluctant to accept more LES pupils than necessary into his school. As required by federal regulations, DMs invited a non-public school to participate in the project and the offer was accepted, though the non-public school had fewer LES children than anticipated. Project staff from both school systems worked well together to jointly implement the project.

Project director. With input from Spanish-speaking community groups, the DMs selected the first year PD. Already a district employee, she was bilingual/bicultural but not from the same group as the majority of the students. As a former counselor, she had a lot of community contacts but lacked experience and training in bilingual education and was reluctant to accept the job. This site's PD role was different from that described in the PIP. The PD and the instructional coordinator (IC) positions were combined, and the person was housed at the school to function as a school-level coordinator rather than as a district-level administrator. As a result, many of the functions assigned the PD in the PIP were performed by the district DSFP. This person assumed the title of director and took care of grant writing, budget administration, and district-level public relations, while the school-level director (called coordinator by the district) was responsible for program decisions, planning of inservice, parent involvement, and writing of the final report. The PD was officially hired in mid-August, which delayed some start-up tasks, such as ordering materials, and caused others, like pre-service training, to be abandoned completely. In addition, the PD had to coordinate with the state program despite the uncertain relation of the two programs and poor working relations between the two directors. She also had to work with a principal that was more concerned with maintaining racial quotas than with serving LES children. She chose not to continue for the second year.

The second year PD was selected by district administrators after advertising widely for the position; however, she did not have more elementary bilingual education experience than her predecessor. She was originally hired to be the project evaluator and became the PD after some project reorganization by the DMs. The role and limitations of the PD position remained unchanged the second year, and the second year PD also resigned.

Project support staff. There was a lot of staff turnover during the two years of the project. During the first year, the IC role was filled by the PD. This was an adequate level of commitment considering the small

number of project students. She related well with students, but lacked experience and training in bilingual methodology and in elementary education. As a result, the PD/IC lacked credibility and the instructional program lacked leadership and coordination. The PD/IC hired two parent educators--one for the public school (full-time) and one for the non-public school (part time). Although this position was not specified in the PIP, the parent educators performed much of the IC's parent involvement role. This reduced program costs since the IC commands a professional-level salary yet a parent educator receives a paraprofessional-level salary. The public school parent educator was a very competent individual who had formerly been a teacher in Mexico. She was the only support staff person to work both years of the project. The non-public school parent educator only worked part of the first year because of the contractor questioning this use of funds. The project evaluator was a bilingual school psychologist and was assigned to the project only ten percent of his time. He had never evaluated a bilingual program before. Difficulties in finding bilingual testers and in locating control group students took more time than expected, leaving very little time for data analysis and interpretation.

During the second year, the IC role was also part of the PD's duties. Again the lack of elementary and bilingual education methodology may have weakened the PD's credibility, but it seems likely that the administrative and organizational problems had a larger effect. The DFP contracted with an outside evaluator who was an experienced evaluator of bilingual programs but who lived a thousand miles away. As a result, the evaluation expertise was improved, but the time devoted to the task and the interaction between evaluator and staff was greatly reduced. The public school parent educator was the only support staff member who remained with the project beyond the first year; even the project secretaries changed.

Project instructional staff. Three teachers (Ts) participated in the project the first year; all were bilingual and two were bicultural. Two Ts were competent elementary school Ts, but one was a high school Spanish T without elementary-level experience. The second year, an additional T

was hired; this T was bilingual but not bicultural. Ts read the PIP Teacher's Manual but found it irrelevant to daily classroom needs. One T had worked in the state-funded bilingual program and was understandably reluctant to change materials and methods, but all Ts received and eventually used PIP core materials. Ts and teacher aides (TAs) did not receive a start-up workshop the first year. The second year a two-day preservice workshop was held. Various in-service sessions were held throughout both years; most of these were general TRC workshops or conferences and not specifically tailored to T or project needs.

It was difficult for the district to find TAs with college course work and certificates as required by state law, so during the first year three high school graduates were hired and given another job title. The TA at the non-public school was monolingual Spanish; the other two project aides were bilingual, and functioned adequately in the classroom. Throughout the second year there was a turnover in teacher aides and some classrooms remained without aides.

Other personnel (regular staff, community, parents). The principal of the project school had to accept the project because it was part of the district's desegregation plan. However, he and the school staff had previously been accustomed to an all-white school and at first viewed the project students as outsiders. Poor working relations existed between the first year PD and the principal, which caused delays and roadblocks for project activities such as ordering materials and conducting inservice sessions. Despite attempts by the new PD to establish new procedures, these difficulties continued during the second year. In some cases, regular staff and project Ts shared materials and students, so some joint planning did occur. As the project became better known, regular staff began to respond more positively to project students.

The Adelante project and the state bilingual project held regular meetings for parents, some of which were open to community people as well. Before the bilingual projects were moved from the segregated to the all-white school, parents were consulted about the move and invited to visit

the new school. It is difficult to say how much community support this represented because, once the move was made, parent complained about busing and launched an effort to return the bilingual projects closer to the community they served. The distinction between the state project and Adelante was somewhat blurred in the minds of parents because meetings for the two projects were held jointly and because the two projects served adjacent grades. Both the public and non-public schools were served by a parent educator who made home visits and held small informal meetings in parents' homes. Parents did not participate in the classroom to the extent described in the PIP; project staff stated that the distance between the school and the community made such participation difficult. At the end of the second year, district DMs decided to move the K-3 bilingual students to still another school. Although the school atmosphere may be more supportive, the project was to be even further from the community. During the second year, parents became increasingly aware of the problems plaguing the project and became more active. For example, the project's move to a new school was precipitated by a parents meeting with the district DMs.

Other resources (materials/equipment, facilities, funds). Materials in Spanish were already available in the district because of the existence of the state-funded bilingual program. The new project funds provided more and different materials, and an effort was made to have all the Adelante teachers use the same core materials. However, during the first year one T preferred and continued to use the original materials. Many supplementary and enrichment materials were purchased with project funds. All the Ts established learning areas in their classes, as suggested in the PIP, and grouped their students. School facilities were adequate. The biggest disadvantage was the distance between the school and the community served by the project. The PD was housed in the school rather than in the district office as the PIP suggests but, since the PD was also the IC, the office assignment was appropriate. One possible result of this arrangement was that district-level PD functions were left largely to the DFD. The district had terminated several hundred Ts because of financial

pressures and although district funds were adequate, they were not abundant. The financial pressure may have motivated the search for federal money and the hiring of existing district personnel even though some did not have the skills specified by the PIP.

Plans and constraints. The district was under a state directive to desegregate. A state bilingual law mandated bilingual education at any level where there were 20 or more LES children at one school. Title VII regulations also applied. Because of financial constraints, the district implemented a number of administrative measures, such as limiting travel to conferences. However, some of these measures were in conflict with Title VII requirements, and required some adjustment.

Students. Although they were never administered language dominance tests, project staff reported that most students were Spanish dominant. RMC observations can only confirm the presence of many Spanish-speaking students. Project students came from a fairly stable population. The Hispanic community was a small, but increasing minority in the area. Students were selected for the project because they qualified for the state bilingual project, i.e., they were limited English speaking and low SES. Students had previously attended a majority Black/Hispanic school. There was no significant change in classroom procedure as a result of changing from the state to the Adelante bilingual project.

Instructional treatment. There was little articulation of program goals and content between the different grade levels and the two school systems. Students were grouped by achievement level for reading but not for math. At the parochial school, the classroom was entirely individualized. Both first and second grade teachers provided English oral language development instruction using standard materials; this instruction was distinct from the reading program. Spanish was used according to individual need, but in decreasing amounts as the children learned more English; thus math, for example, was taught mainly in English by the end of first grade. During the first year the project consisted of one kindergarten and one first grade classroom in a public and one mixed level class in a parochial

school. During the second year a second grade class was added at the public school.

In the first grade, students received thirty to forty-five minutes of math instruction, sixty to ninety minutes of Spanish reading, and forty-five to sixty-five minutes of English language arts. Not all first grade students were reading in English by the end of the year but most of the public school students had half a year of English reading instruction for forty minutes daily. Spanish reading was continued in the second grade but less intensively. No schedule was available to RMC for the second grade.

ADELANTE - SITE D
PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. Site D is in the United States Trust Territory of Puerto Rico. All of the students were Spanish monolingual and lived in an area from which many families traveled to and from the continental United States. The two school districts participating in the project were part of a large metropolitan area.

Overview. The Spanish-speaking environment of Puerto Rico was a totally different setting from the Adelante PIP origination site. Most Adelante materials, methods and teacher training practices had been developed for areas where Spanish is a minority language and English is the principal language. Because Puerto Rico is a Spanish-speaking society, everything from program goals to development of materials and tests had to be developed. There were few appropriate materials and practices to guide the DMs in setting up the project and the Adelante PIP was no exception.

The original proposal called for teaching Spanish to English-speaking students returning from the mainland, but it was difficult to concentrate these students in any one school. After six months of negotiating with the funding agency, the goals were rewritten so that Spanish-speaking children could be taught English. The students were to become bilingual, so that if they were to spend any time on the U.S. mainland, their education would be only minimally disrupted.

Decision makers. Two levels of decision makers (DMs) existed at this site--the state education agency (SEA) staff who wrote the proposal and administered the project, and the DMs at the two local education agencies (LEAs) where the project was housed. A change in SEA directors of bilingual education occurred between project selection and start-up, but the function continued to be performed smoothly. The ASK was available to the DMs and the TRC had sent them a complete PIP; however, the PIP project they

applied for and the one they were eventually assigned by the funding agency were different. The SEA DMs were familiar with local classroom practices and curriculum, and with community opinions. They were interested in obtaining funds for bilingual education but had some trouble fitting the model projects to their needs.

DMs saw the ASK and, at their request, the Nuevos Horizontes PIP. The funding agency assigned the Adelante PIP and the original proposal for Nuevos Horizontes was rewritten. Neither PIP was really appropriate for this site. They needed a completely different model, which did not exist.

LEA-level administrators were very cooperative with the SEA DMs, partly because this educational system is fairly centralized and hierarchical. District-level personnel did not have the experience in fund raising or in administering special projects independently of the SEA. LEA DMs were involved at the time the initial proposal was written, but when the nature of the proposal changed, this LEA was dropped by the SEA and two others were selected.

Project director. The project director (PD) was bilingual and Puerto Rican. She was an employee of the SEA and the evaluator of another Title VII project. She was hired very late because the project start-up was delayed for four months while LEA changes were made and project goals were negotiated. She was not familiar with the Adelante PIP nor the proposal when she was initially assigned to the position. Although she worked closely with her immediate supervisor, who assumed some of the PD functions, she was effective in implementing the project given the many constraints existing at this site.

Project support staff. The support staff was housed at the SEA offices, which were located fairly close to both LEAs involved in the project. The staff worked under and cooperated closely with the SEA director of bilingual education. All support staff members were bilingual and Puerto Rican. The instructional consultant (IC), who had the role of a

supervisor of teachers in addition to a resource teacher, was hired several months after the project began. He had no previous experience in bilingual education, but had an M.A. in the teaching of English as a Second Language (ESL), which was possibly more relevant at this site. The SEA director for ESL was consulted regularly by the PD and IC and was very interested in the project. Near the end of the first school year, an evaluator was hired for the project but he did not have adequate skills. He was not retained over the summer and a new person with an appropriate background was hired for the second year. Since no summative evaluation was possible the first year due to lack of appropriate tests, not having an evaluator did not present any problems. The fact that the evaluation position was funded at a half-time level made filling this position difficult since no one with the appropriate skills was willing to work part-time. The parent liaison position written into the proposal was never filled. Those funds were used instead for the development of appropriate tests. Test development was a major project effort paid for partly by the project but also supported by SEA technical staff and consultants from a major testing company. SEA and project staff also wrote English curriculum objectives and materials to complement the existing Spanish curriculum.

Project instructional staff. Although the project teachers (Ts) spoke the same language and belonged to the same cultural group as their students, only two out of eighteen were bilingual. The Ts were responsible for the regular Spanish-language instruction; bilingual teacher aides (TAs) prepared and conducted short lessons in English that paralleled the T's regular lesson. The TAs had lived on the United States mainland previously. About half were university students with an interest in education and were continuing to work towards a B.A. degree in bilingual education. Ts and TAs worked well together and planned together once a week. Because of the particular importance of the aide role at this site, the aides received a week of pre-service training during the first year, while the Ts received only one day's training. First year in-service training consisted of a discussion of the Adelante Teachers' Manual--which was of limited relevance--and training in vocabulary development and ESL in the content areas. Second year staff development began with a needs

assessment instrument completed by all Ts and TAs that was then used to plan a series of workshops given by the PD, IC, and consultants.

Other personnel (regular staff, community, parents). The regular staff at all project schools was composed of Spanish-speaking Puerto Ricans. The project staff invited regular staff to participate in the project's cultural activities and shared materials and equipment with them. The principals were willing to help the project staff and did not interfere with daily project procedures in any way.

Parents and community members from one LEA were consulted at the time of proposal writing, but this LEA was later dropped from the project. Each of the two schools in the project held regularly scheduled meetings with parents throughout the school year. During the first year, parents at this site did not regard helping in the classroom as an appropriate role; they participated only in cultural events and field trips to which community members were also invited. During the second year, parents' roles changed considerably. They volunteered time in the classroom, assisted in administering and correcting tests, made recommendations, and became advocates of the program in their communities. English-as-a-second-language (ESL) classes for parents were organized at each school. Many parents requested the program for their children, and so program enrollment increased.

Other resources (materials/equipment, facilities, funds). Curriculum materials suggested in the Adelante PIP and most standardized tests were totally inappropriate for this site. Very few appropriate commercial materials existed. An extensive pre-project and ongoing local materials development effort was conducted. Because of the late start, almost all materials had to be developed by the TAs after they were told what material the T would use. Therefore, the materials were of uneven quality. By the second year, elaborate teacher's guides were being developed for English instruction in the content areas, paralleling guides already existing for Spanish instruction. The facilities were adequate by local standards, but some rooms were very crowded. This made it difficult to work

in small groups or to use learning centers, although this occasionally did occur.

Plans and constraints. A major constraint was the large difference in context between this site and most other Title VII sites. Materials, procedures, and instructional approaches that were appropriate for Spanish-speaking students in the continental United States were simply not appropriate for Puerto Rico. Most of what the PIP specified also needed extensive modification. During the first year, it was impossible to follow Title VII evaluation requirements at this site because of the absence of adequate tests. This was in part due to the local practice of not testing kindergarten through second grade students. By the end of the second year, locally appropriate tests had been developed and control groups had been identified and tested. Some modification of the instruments was expected after detailed analysis. LEA regulation prevented Ts from being released during class time. This made it impossible to follow the PIP guidelines for in-service training. However, since the TAs were responsible for bilingual instruction, the lack of time available for training Ts was not crucial at this site.

The project schools were part of a highly consistent and centralized educational system. An area-wide ESL plan existed covering all grades. Other areas of the curriculum were also covered by systematic curriculum plans.

Students. Project students were Spanish monolingual and totally like non-project students. Project schools were chosen because they were located in an area of relatively frequent movement between that neighborhood and the continental United States. Within the three project schools, all students at the appropriate grade level were enrolled in the project. Absenteeism was fairly high at one school.

Instructional treatment. The content of instruction in all subject areas was guided by SEA-developed curriculum and by a standardized use of textbooks and therefore varied little across classrooms. Although

students were occasionally grouped, most instruction involved the whole class in a single activity.

Prior to the project, instruction had been conducted in Spanish, with one hour of ESL per day. The project added English-speaking aides to all the classrooms, and each lesson in a content area was followed by a ten-to fifteen-minute lesson in English, reinforcing the same concepts that had been taught in Spanish. The project also contributed a cultural component that included the study of local and United States culture. There were field trips and other activities in which the parents also participated. All students continued to receive an hour ESL class with another teacher. Classes usually did not have audiovisual equipment or activity areas, but demonstration objects and teacher-made materials were frequently used. The project, which was housed in three schools, consisted of six kindergartens and six first grade classes the first year and six second grade classes were added the second year.

First and second grade students followed the same schedule. They had ninety minutes of Spanish reading and language arts and sixty minutes of ESL. Math, social studies, and science were taught for thirty to forty-five minutes in Spanish, each followed by a fifteen minute session in English reinforcing the same content area.

NUEVOS HORIZONTES - SITE A

PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. This site is located in a large, urban community and is one of the largest school districts in the country. It has 55 elementary schools, 15 junior high schools and eight high schools. The elementary school enrollment is 31,532 students. An estimated 32% of the districts 61,517 students are minorities. About seven percent of district pupils are classified Limited English Proficiency and nearly one percent are Non-English Speaking. An estimated 67% of these students are enrolled in elementary school. Minority enrollment in the district increased from 13% to the present 32% in ten years, of which 11.5% was Hispanic. Hispanic enrollment increased to this present level from 4.5% of the total district enrollment ten years ago. Hispanics comprise 13.0% of the elementary enrollment and 10.7% and 9.4% of the junior high and high school enrollment, respectively.

Overview. This site had been alleged as being out of compliance by OCR the previous year and viewed the PIP project as one way to get back into compliance. They made a major attempt to replicate the PIP faithfully.

Decision makers. This site was a highly sophisticated district with a definite chain of command. The superintendent and school board were Anglo and spoke no Spanish. This site had a history of submitting Title VII proposals since 1973, but their fairly low N/LES count was the cause of their not being funded previously. The school board and the district as a whole, while not overly enthusiastic about bilingual education, were willing to try it, believing that it may help children. Although the ethnic composition of the school board did not change the second year, they continued to support the program.

In Site A the superintendent encouraged the director of the non-English-language projects in the district to seek out sources of funding,

especially Title VII, and to submit proposals. This director was competent and influential in his area. He was first informed of the PIPs by the TRC at a county-wide meeting. The TRC visited the district at the director's request and showed him and three potential target-school principals and the entire Analysis and Selection Kit (ASK) with slides and tapes. The TRC offered their continued help. They made the PIP manuals available for a half-day while the district was writing their Title VII proposal.

The director delegated work to the district bilingual coordinator, who was bilingual/bicultural, and very knowledgeable in bilingual education. Both the director and the coordinator had a good working relationship with the community. The project ran smoothly throughout the different phases as far as the decision-makers' activities and policies were concerned.

Project director. The project director (PD) was hand-picked by the director of non-English-language projects and the bilingual coordinator. She had the PIP-specified qualifications, was enthusiastic and hardworking, and had the necessary teaching and administrative experience to be PD. The PD at this site faithfully attempted to replicate the Nuevos Horizontes model. She kept very frequent contact with the district evaluation unit and believed, as they did, that when the district accepted Title-VII funding, they also agreed to replicate the PIP project. She made every possible effort not to deviate from the PIP and consulted the manuals so much that she practically had them memorized. For both years, she joined the project during the summer on a half-time basis to organize it. She shared an office with the district bilingual coordinator and frequently discussed the project's operation with the coordinator and with her supervisor, the director of non-English-language programs. She was an effective PD and had so much interest in the project that she telephoned the developer site to obtain as much information about the program as she could. Several principals and teachers commented that she was exactly like the PIP-described PD.

Project support staff. At OBE's request the district at the last moment added a fourth school to the project because the developer site had four schools. This required a reallocation of the budget and prevented the site from hiring an instructional coordinator (IC) until January. The PD both filled the PD and IC roles until the IC was hired. The IC had the PIP-specified skills and knowledge, but lacked the necessary assertiveness needed to be an IC. However, the PD worked closely with the IC so this presented no problems. The second year the site had adequate funds and were able to hire a full-time IC. The district had its own evaluation unit and all evaluation was internal. The project also had a part-time community coordinator that performed PIP-specified liaison functions between the project and the community. It was a non-certificated position and in the two years of project operation, three different persons successively occupied that position.

Project instructional staff. The project teachers (Ts) and teacher aides (TAs) were bilingual and somewhat biliterate and had all the PIP-specified skills. The first year, some Ts and all TAs were bicultural even though the PD indicated that bilingual TAs were difficult to find. Not all TAs were bicultural the second year but all met the Lau criteria of linguistic proficiency and cultural awareness. The majority of Ts the second year were able to teach bilingually, but they varied in their degree of Spanish fluency. Both the district bilingual coordinator and the PD sat in on the interviewing of staff candidates in one school at the request of the new principal, but due to district policy did not make the final hiring decisions. For the second year, the PD was given the responsibility of assessing the aides' language proficiency by administering language assessment tests. In two target schools, the principals either used bilingual Ts they already had, transferred a bilingual T from another school, or hired them. Both years all Ts were hired in time to attend the start-up workshop; TAs did not start to work until the first day of school, but this presented no problem. Although TAs did not attend the start-up workshop they were provided many inservice training sessions during the school year by the PD. The PD gave all Ts a copy of the Teacher's Manual and requested not only that they follow the manual

but they write problems, reactions, etc., in it. This was the one site where Ts realized they were trying to replicate a PIP project, where they knew the information in the Teacher's Manual and where the Teacher's Manual showed use.

Other personnel (regular staff, community, parents). The PD and principals tried to orient and involve the regular staff in workshops. There was no jealousy between the staffs as the non-project staff tended to view the Title VII staff as having a lot more work to do instead of seeing them as receiving more materials and attention.

There never had been a great deal of parent and community involvement with the schools, and project implementation did not change this. This was due in part to some principals who viewed parental involvement as rather burdensome due to the fact that parents do not have telephones, are transient, etc.

There were parent advisory committee monthly meetings, however, and the principals did attend them. Parents had no negative responses to the program.

Other resources (materials/equipment, facilities, funds). The first year, the PD and district bilingual coordinator ordered materials suggested in the PIP and distributed them appropriately. Yet these materials arrived late for two reasons: the PIPs did not indicate federal regulations regarding the use of Title VII monies for purchasing materials and some confusion occurred resulting in a late ordering of some materials; second, some PIP-recommended materials were out of print or had different price lists, or the district textbook catalogue needed to be updated. This late arrival of materials did not cause instruction to suffer. The second year the ordering of materials went smoothly. Some PIP materials were ordered, but they were viewed primarily as supplementary materials. Some materials were developed by Ts during the in-services. While the age of the schools varied, all were comfortable and well equipped.

During the first year, OBE asked the site to include a fourth school to duplicate the developer site pattern of four schools yet did not allocate additional funds. This resulted in fewer funds to hire a full-time IC.

Plans and constraints. Project staff really tried to replicate the PIP. There were district policies operating that constrained the role of the PD. For example, the PD did not hire the Ts nor evaluate them. At the beginning, this resulted in the PD's spending little time in the classrooms because she was concerned that the Ts might view her as evaluating them. The PD worked closely with the district evaluation unit to develop detailed performance objectives and ways of assessing them. The PD used the PIP as a checklist throughout the year.

Students. Most students in the project classrooms were LES. During the first year, children placed in the classes were selected on the basis of language proficiency by the principal and Ts. In the second year, selection procedures were based on three steps: (1) identification of student language dominance by a home survey form, (2) parental permission for participation in the program, and (3) Bilingual Syntax Measure scores in English and Spanish. Children were similar in ability to non-project children in the district and tended to be a reportedly transient, urban population.

Instructional treatment. All project teachers in grades 1 and 2 spoke English and Spanish and were effective teachers. All aides were bilingual and worked with children reinforcing lessons presented by the teacher. Children were grouped as suggested by the PIP, on the basis of language proficiency and academic needs. There were four kindergarten and four first grade classes in the first year of the project. Four second grade classes were added the second year.

Reading and language arts were regarded as distinct subjects at this project site. In grade one, students were taught to read in their dominant language. Reading in the second language was introduced when individual

students exhibited a readiness for this instruction. Some children learned to read in both languages in first grade, but the majority waited until second grade for second language reading instruction. Children were grouped by language dominance and "needs level" for reading, language arts and math. Concepts were introduced in the students' native language and were reinforced in their second language. Children also had ESL or SSL instruction. In general, instruction was satisfactory. The use of Spanish and English instruction was varied throughout the day, and both teachers and children were free to use the language of their choice for clarification and social communication. Some children in both grades one and two also attended pullout ESL, English reading and English math labs funded by non-Title VII funds. These labs were taught by specialist teachers to children who needed extra help in these subjects. Children went as individuals and in small groups. The labs operated for different periods of time such as a 3-week basis to several months duration.

Instructional time for reading and language arts varied across classrooms with an average of thirty minutes daily for language arts and an hour daily for reading. Math instruction occurred for approximately thirty minutes daily.

NUEVOS HORIZONTES - SITE B

PROJECT SUMMARY
1977-1978 and 1979

Setting. This site is a very small, isolated rural district located in a sparsely populated area. The city has a population of 2,738 and the district student enrollment was 966 students. An estimated 58% of the K-2 student enrollment was comprised of students having a limited English-speaking ability. Forty percent of the school population was comprised of Chicanos, most of whom were poor and migrant.

Overview. Although this site had received state funds for a bilingual program in previous years, little or nothing in the way of a bilingual program had ever been developed. The district had a migrant education program for the previous ten years, yet it had no effect on student achievement at all. While the support staff was positive towards the program, the administration and project teachers were skeptical. All nine of the district's K-1 and 2 classes in this site participated in the project. However, not all children in these classes participated.

Decision makers. Site B was such a small district that there were only three decision makers (DMs): the superintendent, the director of federal projects (DFP), and the principal of the elementary and secondary school. The DMs and school board were Anglo and spoke no Spanish. Bilingual education was not seen as a need in this district. The majority of the town's population was Anglo and spoke little or no Spanish.

The DFP had been in the district for many years, yet the superintendent had been there just one-and-a-half years. The DFP knew very little about bilingual education, or about writing proposals for Title VII funds, but she knew their non-English speaking (NES) and limited English-speaking (LES) population needed help and felt bilingual education might provide that help. She attended a meeting hosted by the state educational agency (SEA) and saw the PIP manuals there. She then hired a consultant and

together they wrote a Title VII proposal, which was subsequently funded. She was not effective during initial budget negotiations, which resulted in insufficient money allocated for program operation. Start-up activities did not begin until August. According to the DFP, the reason for this delay was that there had been no contacts from OBE prior to that time. While DMs took little action the whole first year, they did not actively block the project's progress either.

Project director. The first year, the DMs had trouble finding a project director (PD) and the superintendent contacted someone he had worked with in another district. This person was bilingual/bicultural and had the childrens' interest at heart, but he lacked a real understanding of the technical issues in bilingual education and experience or training in the field. Fortunately, there was an instructional coordinator (IC) who was experienced in bilingual education and who saw that the PD's duties were fulfilled. The PD was not hired until August and the IC until September. This resulted in them not attending the district's pre-service workshop, not selecting staff, and not ordering the core materials. One problem that the PD and IC encountered was the lack of an established power base. This was the first time in that town that a Chicano had a position of authority. Both the PD and the IC were therefore hesitant to anger or wrest power from the DFP. The PD believed he had the entire five-year funding period to start up the program. For this reason, among others, little was accomplished during the first year.

The second year the PD accepted another job elsewhere and the IC assumed the PD position. Because this new PD was experienced in bilingual education and already had spent one year with the project, everything ran smoothly.

Project support staff. During the first year, the only support staff was the IC. He did an adequate job, given the fact that he was also the project evaluator and assumed many PD duties. The second year the project hired a full-time demonstration teacher funded by Title VII. She was

a trained and experienced bilingual T and supportive of the project. She gave demonstration lessons during classtime for the Ts and TAs. She also taught science in English and Spanish and performed some IC-type duties. Overall she was an effective demonstration teacher.

Project instructional staff. This site was unable to recruit qualified bilingual teachers (Ts) for a number of reasons: recruitment did not begin until July; the site was small and isolated; and the pay scale was low. The district did not make a serious effort to fill two existing vacancies with bilingual Ts. As a consequence, all of the project Ts were Anglo and spoke no Spanish. They knew some vocabulary and simple sentences but were far from fluent, bilingual, or able to teach in a bilingual classroom. At the start of the year the staff did not believe in bilingual education but favored ESL. They regarded the N/LES children as slow learners and did not regard their problems as being language-related. As they saw the children improving, they changed their attitude somewhat. Both the young, inexperienced first-year Ts and the Ts who had taught for many years lacked basic teaching skills. The IC presented inservice workshops, but Ts rarely attended. He worked on the teacher aides' (TAs) Spanish literacy so they could teach Spanish reading and oral language development. Aides attended Spanish literacy classes for 17 weeks for three hours a week at a community college 25 miles distant. In this isolated location, Ts had little motivation to go beyond the bare minimum in teaching or to seek training to upgrade their skills. Each T in grades K and 1 had a half-time TA that was bilingual and bicultural but not biliterate. There were only two TAs that were shared by three Ts in second grade. These TAs taught Spanish and English reading in two reading centers all morning long. It was the responsibility of the TAs to instruct the N/LES students in Spanish reading, Spanish language development, English as a second language, and to teach the FES student Spanish as a second language. None of the TAs had any education beyond high school and none had previous training or experience in the classroom. During the second year, there was more contact between the T and the students due to the development of a differentiated staffing model where the Ts and TAs worked with all students in different groups.

Other personnel (regular staff, community, parents). In this site, other persons played very minor roles. Since the project encompassed all K and 1 and 2 classes in the district, there were no non-project Ts at K, 1, or 2 to provide input on problems. The most common attitude among upper-grade Ts was that bilingual education was a type of remedial program. The Anglo and Chicano groups within the community did not communicate much with each other nor with the district staff. The community was comprised mostly of farmers and migrant agricultural workers. Toward the end of the first year, Chicano parents were becoming interested in the program, and many were attending parent advisory committee meetings. During the second year, many Anglo parents became very interested in their children learning Spanish.

Other resources (materials/equipment, facilities, funds). Since this site had received state funds for two years prior to receiving Title VII funds, they had some bilingual, state-endorsed textbooks. However, since no specific program had been functioning during those two years, the Ts had not used and did not know how to use these materials.

When the DFP contacted the SEA during selection/adoption, she was asked if she were willing to purchase a Spanish-English reading and language arts series and volunteer to pilot the series. She felt it was a mandate and agreed to it despite the fact that: the site already had materials for a comprehensive bilingual reading project purchased with state funds; she was not sure that the new program would be an improvement or even appropriate for their students; and its cost represented almost the entire budget allocation for project materials. The site purchased the new series, was never contacted to pilot it, and the new PD and IC found it to be less appropriate than the reading series they already had. This new series was used only as supplementary material. The purchase of this material meant that the site was unable to purchase other needed bilingual materials.

Facility locations caused a problem in this site. The K classes were located across town. This facility was a dark concrete building

that had been used previously for the Black children before desegregation. Children in these classes were bused across town daily to the district cafeteria for lunch. Almost an hour of instructional time was lost daily in transporting students. The first and second grade classes were located in the 1-12 school. Project classrooms were sufficiently large, well lit and appropriate for instruction.

Because the project budget was reduced during negotiations, the project did not have enough funds to hire a community coordinator. Therefore, the PD and IC had to perform the community coordinator's duties. These activities got off to a slow start because the PD had just moved to town in August and the I.C. moved to town in November. But as the year progressed and they became more acquainted with the community, they were more effective.

When the site submitted the initial proposal, they requested that all classes in K,1,2 be funded. They received funding in August, 1977 for only grades K and 1 in order to conform to the Nuevos Horizontes PIP which encompassed only K and 1 during the first year of operation. When the budget was negotiated it was reduced to the extent that they were unable to hire a community coordinator. Since the budget was not approved until August, this resulted in a late ordering of materials. In addition, as previously mentioned, most of the funds allocated for materials were used to purchase one reading and language series and other areas of the curriculum were left wanting. Because OBE insisted that the DFP, PD and IC attend an OBE meeting in Washington in August, there were not sufficient travel funds remaining for them to attend training conferences the rest of the year. All of these expenditures left almost no money in the budget for operating costs. During the second year when the project expanded to second grade, there were no problems; sufficient funds were budgeted for the project. They were able to order PIP recommended, core material as well as additional supplementary materials.

Plans and constraints. This district had so few written policies that nothing really constrained the project implementation. Because of

the isolated geographic location and lack of knowledge and experience in dealing with bilingual education, they were not particularly aware of nor could they adequately deal with the plans and constraints of funding and project guidelines beyond the most blatant ones.

Students. The program served approximately 126 students the first year and 240 the second year. The majority of them were from Spanish-speaking homes and had parents who were migrant farmworkers. While some of the students were permanent residents, those that were classified as migrants often re-entered this site two and three times a year. Most of the children spoke some English and those who were truly NES were mostly new arrivals from Mexico and migrant farm workers. The students were of average ability as judged by achievement scores. However, at the start of the year, these students were considered to be below average ability by the staff because they were grouped on the basis of English language achievement.

Instructional treatment. District policy stressed reading, language arts, and math as priority subjects. During the project's second year, science was offered for the first time in the district; it was taught in the second grade by the project's resource teacher. Science lessons were presented in English and Spanish. Although several teachers have completed a number of college hours in Spanish and have received the state certification, most were not adequately fluent. Thus, the bilingual-bicultural aides were responsible for all of the instruction in Spanish. All the Ts assigned their TAs the responsibility for the Spanish component of the program. This often resulted in N/LES students having more exposure to the TA than the T. However, some teachers did attempt to present some lessons in Spanish to small groups. The first year some Ts had a very traditional classroom with no grouping by achievement; children sat in rows. Some K classes were focused around television programs such as Sesame Street; in one class, no open books were observed during any of several visits. The second year, teachers were more flexible in their classroom management style and began to use reading centers, grouping techniques, etc. A few classes had learning centers, but these were used minimally.

Reading and language arts were interrelated. In first grade children identified as English monolingual, English-dominant, or bilingual learned to read in English. A few children, who were ready, were also taught to read in Spanish. Spanish monolinguals, and Spanish-dominant children learned to read in Spanish. In second grade, children received reading instruction in both languages. Reading and language arts were taught in small groups at reading centers within each classroom. Groups were instructed by the teacher or the aide, depending on the language of instruction. Math was taught in English by the teacher to the entire class. Children who did not understand the English math lesson were tutored in Spanish by the aide. Children classified as migrant went to the migrant center every day for thirty minutes of instruction in ESL or in English oral language development.

The entire morning of each day was devoted to reading and language arts for all children. Spanish monolinguals and Spanish-dominant children spent one hour or more learning to read in Spanish with the aide in grade one. English monolinguals, English-dominant, and bilingual children received language arts and reading in English with the teacher during a period covering two hours. They worked in small groups or did individual work. In second grade, the aide spent one hour teaching reading in Spanish to Spanish monolinguals and Spanish-dominant children. These children also spent thirty minutes each morning with the aide learning to read in English. The English monolinguals, English-dominant, and bilingual children spent the morning working with the teacher in small groups or working individually.

NUEVOS HORIZONTES - SITE C
PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. This site is located in a major, highly urbanized metropolitan area. It receives students from three adjoining cities and has a wide SES range. It services one of the fastest growing minority and Spanish-surname populations in the area. The district had 14 elementary, three intermediate and three high schools for a total enrollment of 16,000 students. Thirty-six percent of the district was Spanish surnamed, yet the majority of these children spoke English. The district is highly transient due to upward mobility, not agricultural migrancy.

Overview. This site had previous Title VII funding and had other bilingual education programs operating at both the elementary and secondary levels. The school district had nevertheless been cited the year before by OCR as being out-of-compliance. The PIP project served the group of students with the second greatest need; the first group was served by a different Title VII project. The second year, the project received a smaller budget due to a low LES/NES count.

Decision makers. Site C was a sophisticated district with a definite chain of command. The superintendent was Anglo and spoke no Spanish but was supportive of bilingual education. The school board was also supportive of bilingual education and had one Chicano among the five board members. The district had received federal and state monies for elementary and secondary bilingual programs for eight years.

The director of one of the districts' bilingual programs attended a county meeting and was contacted informally by the TRC and informed of the PIPs. The director invited the TRC to make a presentation to the district. Target principals attended the presentation, were shown the ASK, and were loaned the PIP manuals. An outside consultant was hired to write the proposal. The project ran smoothly throughout the different phases as far as the decision makers' activities and policies were concerned.

Project director. The project director (PD) had been an elementary classroom teacher in the district bilingual program for two years before applying for the PD position. The position was advertised statewide, and she competed against many candidates. She was hired during the summer for one month to rewrite the proposal because OBE requested that a revised version conforming more to the PIP model be submitted. (The initial proposal included a system of satellite schools.) She was hired as PD at the end of the summer. She interviewed and hired all the teacher-aides (TAs) but was not involved in the hiring of teachers (Ts) as the principals were very autonomous in this district and hired their own staffs. She had all the PIP-specified qualifications and was an effective PD.

During normal budget negotiations with the Office of Education funds were reduced; as a result, the PD and the instructional coordinator (IC) roles were merged into one position.

Project support staff. Due to a reduction in the proposed budget the first year, the PD and IC positions were combined. The person filling this PD-IC position was very capable and performed adequately. The second year, the PD assumed another position in the district and split her time between the new position and serving as project PD. However, she continued to be an effective PD. A full-time IC was hired the second year and focused primarily on staff development, which included demonstration lessons and individualized inservices. She was an effective IC having been involved with bilingual education for ten years. The person serving as a community coordinator (CC) both years was an experienced CC having occupied a similar position previously in a different bilingual education project in the district. The evaluator was hired on a consultant basis. During the first year, the project contracted with the county Office of Education for evaluation services. The second year, the project contracted with the PD of a bilingual education project in another district to do the evaluation. Both evaluators performed their tasks adequately.

Project instructional staff. One of the three target schools already had two experienced bilingual Ts at grades K and 1; the second school

was able to transfer two bilingual Ts; the third school had a bilingual T in the upper grades whom they transferred to the primary level. The second year several new Ts asked to teach in the program. One of the project Ts was working on a bilingual specialist credential. Each T had a half-time TA. All of the TAs were bilingual/bicultural and were adequately qualified for their roles. They attended the pre-service workshop. (The original proposal had indicated full-time TAs. However, OBE would not approve TAs at more than a half-time level since that was what the Nuevos Horizontes developer site had had.) All staff were adequately qualified for their roles. During the pre-service workshop the PD explained the Nuevos Horizontes project and gave each T a copy of the Teacher's Manual. However, most Ts read it at the beginning and did not refer to it much after that. During the second year the majority of Ts had adequate language skills for bilingual instruction.

Other personnel (regular staff, community, parents). Other persons played very minor roles. Some N/LES parents were not eager to have their children participate in the project, fearing that their children would not learn English or not learn it quickly. The project Ts and site principals visited or called these parents to enlist their support. By the end of the school year parents were quite supportive of the project and some volunteered time in project classrooms.

Other resources (materials/equipment, facilities, funds). The PD selected and ordered some of the PIP-recommended materials. She did not order all of the recommended materials because some of them were not appropriate, since they were written for Puerto Rican children. Others, she felt, were inferior to materials that she knew. The three target schools were fairly new and all had comfortable, adequately-equipped classrooms. The funds were adequate for both years of project implementation.

Plans and constraints. The entire district used the school board-adopted reading, language and mathematics curriculum, which was transitional in nature. Therefore, the PIP performance objectives were used

only in science and social studies since there were no board-adopted curricula in those two areas. The project staff did wish to replicate the PIP project where possible.

Students. Since the district already had a Title VII-funded bilingual program in K-1, the students being served in this project, although they were also N/LES, were the group with the second greatest need.

Instructional treatment. The district had board-mandated continuums for scope and sequence in reading, language arts, and math that guided instruction in English. The project translated these continuums into Spanish and thus the English and Spanish instructional strands were kept parallel. All teachers spoke English and Spanish; however, there was a wide range in fluency and teaching experience. All aides were bilingual and were used to reinforce lessons presented by the teacher and to give tutorial help to individuals when needed. Children were grouped in reading and language arts by language proficiency and achievement level. In grade two children, for the most part, were grouped by achievement level in math regardless of their language proficiency. Instruction was provided in the students' native language for concept development and the second language was used to reinforce. This followed the basic PIP suggestions. The instruction was adequate. The first year, the site had six classes in three target schools. Three more classes were added the second year; there were three kindergarten, three first-grade and three second-grade classes.

Reading and language arts were considered as separate subjects at this project site. In grade one, children learned to read in their dominant language. In grade two, FES children continued to read in English and received instruction in oral Spanish language and Spanish phonics. Bilingual children read in both Spanish and English.

Children were grouped for reading and read with the T and TA. Children who read in both languages received 30 minutes instruction daily in reading per language; FES children read in English for 40 minutes daily.

Language arts for FES children occurred daily in English for 20 minutes and in Spanish for 15-20 minutes. LES/NES children received 30 minutes daily instruction in English language arts and 15-20 minutes daily in Spanish language arts. Math instruction in English for FES children was 40 minutes daily and LES/NES children received math instruction in English for 20-25 minutes daily and math instruction in Spanish for 25-30 minutes daily. Children identified as being eligible for Title I services went to pull-out reading and math labs daily for 30 minutes.

NUEVOS HORIZONTES - SITE D

PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. Site D is located in a small, semi-industrial college community near a major metropolitan area. Sixty-five percent of the student enrollment was Chicano; this enrollment reflects the numerical majority of Chicano residents at this site, most of whom were employed in unskilled labor. Thirty-seven percent of the district's Chicano students came from households in which Spanish was the dominant language.

Overview. This site had a history of successful bilingual education at the K level for the ten years preceding this project. District support was strong and the staff was highly prepared and effective. During the first year, all K students in the district were housed at one school. The following year, all K and 1st grade classrooms were located in a new facility. During the summer preceding the second year, an elementary school was converted to house all K and first grade students in the district. The school was organized as an open school with the exception of a few first grade self-contained classes that were not funded by Title VII. The K program was excellent and had been a demonstration program for the state for four years. Since it was the principal and resource teacher of this program who desired the Title VII funds, this site implemented the program only at the K level the first year and expanded to the first grade during the second year.

Decision makers. The role of the district decision makers (DMs) at this site was unique. The superintendent was supportive of bilingual education but played no role in getting a PIP project nor in its implementation. The key DMs were the site principal and the resource teacher, who was slated to be the project director (PD). This district had a bilingual program with different degrees of intensity for the past ten years. The principal and prospective PD decided to apply for Title VII funds to implement a program at kindergarten level once again. With the superintendent's permission, they hired a consultant from an outside firm to write

the Title VII proposal. The consultant informed the site of the PIPs and suggested they submit a proposal for a PIP project. Both the principal and the resource teacher supplied the consultant with all the information needed to write the proposal. The DMs wanted to implement the Nuevos Horizontes PIP project, yet the Office of Education tried unsuccessfully to persuade them to accept the Venceremos PIP project instead. As a result, the site did not receive the Nuevos Horizontes PIP until September.

Project director. The role of PD was successfully shared by the principal and PD. The PD (who also acted as the instructional coordinator during the first year) and the principal were seen as having parallel authority by the rest of the project staff. The PD was bilingual/bicultural and had several years' bilingual education experience as both teacher and resource teacher in the district. She had all the PIP-specified qualifications and was an excellent PD. The principal was Anglo and spoke some Spanish. The staff had great respect and loyalty toward both the principal and PD, and it is hard to imagine this kind of a unique program elsewhere. The principal and PD tried to replicate the PIP project, but their own program was substantially better than the program described by the Nuevos Horizontes PIP. All project staff at the K school felt responsible for the success of the project whether they worked directly with project students or not. During the second year, a full-time instructional coordinator (IC) was hired and the PD devoted all her time to project management duties.

Project support staff. The project had a very strong, capable support staff and this added much to the total success. The IC, who was hired the second year, had taught in the bilingual K program for several years and had management responsibilities in the program. The full-time community coordinator (CC) had previously worked as an aide community liaison, and migrant coordinator. Evaluation was contracted to an evaluation firm skilled in evaluation of bilingual education programs.

Project instructional staff. The project teachers (Ts) were all bilingual/bicultural, and experienced. All teacher-aides (TAs) were bilingual/bicultural, and had experience in bilingual education classrooms.

It would be difficult to find a more experienced, better qualified, more dedicated, enthusiastic staff. Since the K school had so many Ts before the project was implemented, it was easy for the principal and PD to decide who would become the project Ts. The Ts were willing to be designated as Title VII Ts, yet it really made no difference in their duties and activities, since the K unit had been operating a bilingual program before Title VII funding. While the PD used the PIP as a checklist, Ts were not particularly aware they were implementing a PIP project.

The situation among the project instructional staff was quite a bit different the second year. This was due to the fact that the all-K school had moved to a new facility, which it shared with all of the district's first grade classes. Most first grade Ts had taught bilingually before. Some had been involved in the Title VII program years ago. Some had taught bilingual classes the previous year under state funds. Some first grade teachers, who were not accustomed to bilingual instruction, open-classrooms, etc., resisted the bilingual education program and open class management style and were allowed to remain in self-contained classes. A few of the very experienced bilingual education K Ts were moved into the first grade component. They were replaced in K by adequately prepared K bilingual teachers.

Other personnel (regular staff, community, parents). In this site, it is difficult to separate regular and project staff. The entire K-school and Title VII first grade section functioned as a body and was operated as a modular system; children spent 20 minutes with each of several Ts throughout the day. All of the staff was responsible for the program's success, attended the same pre- and in-service sessions and cooperated fully.

The community had both an Anglo and a Chicano group. Although Chicanos were in the numerical majority, the schools and the city were run by Anglos. There were no apparent problems, yet there was little contact and interaction among these two groups. The principal and PD made a major

effort to inform the community and to include parents in the children's activities. For example, parents were invited to come to school when a child first learned to read so that the child could read for his parents. There was an English language tape-recording accessible by phone so that one could hear the K-school and 1st grade activities for the week. The parent advisory committee meetings were lively and well attended.

Other resources (materials/equipment, facilities, funds). Since the kindergarten had been operating a bilingual education project for so many years, they had many K materials already available. The K facilities consisted of two portable buildings and one entire school building. During the second year, the entire district K program moved across town to occupy an elementary school jointly with all the district's first grade classes. This building had previously been a K-6 school.

Funds, although adequate for the first year, were not received until November; this resulted in late orders for materials. The site ordered a copy of all of the PIP-recommended materials and used them as supplementary materials. Funds were adequate and there were no problems with the budget the second year.

Plans and constraints. This site selected the Nuevos Horizontes PIP to replicate but the Office of Education insisted they adopt Venceremos. They negotiated throughout the summer and finally retained Nuevos Horizontes. As a result, funding was delayed and they did not see the PIP manuals until the fall. In fact, this really did not create many problems because the PIP manuals offered little in the way of useful information for this site; they really did not need the PIP material to install an effective bilingual education project.

Students. In the first year, the project served approximately 300 students; approximately one-third of those students were identified as monolingual Spanish-speakers. During the second year, fewer Spanish monolinguals were identified in K but the project was unable to identify the

reason for this decline. An estimated 120 students in K and 160 students in first grade were served by the project during the second year. Less than one-third of the project students were identified as LES/NES in K. In first grade, an estimated 56 students were identified as LES and 7 were identified NES.

Instructional treatment. The Title VII project only encompassed K and first grade. All K and first graders in the district attended one school, which was organized around three major pods and a few self-contained classrooms. Children in the K program spent a full day in school instead of the usual half-day. All Title VII students were distributed throughout the two pods. Teachers and students did not switch pods, but new groups of teachers and children within pods formed every 20 minutes at learning centers throughout the day as they moved through the various academic subjects. All eleven project teachers in the pods were highly competent, experienced teachers. All teachers and aides instructing bilingual or LEP children were bilingual-bicultural. The teachers who taught English reading and English language arts to monolingual English-speakers were competent, experienced Anglo teachers who spoke little or no Spanish. However, they never taught bilingual or LEP children.

Teachers presented all new material and focused on concept development while aides did reinforcing activities and tutored individual students when necessary. All instruction took place in very small groups at learning centers and was individualized to the extent possible. Children were grouped for each subject by language proficiency and achievement. Children's questions and comments were accepted by the staff in either language. Instruction was in the student's native language, complemented by ESL or SSL classes.

Reading and language arts were not regarded as distinct subjects. The language arts period in the dominant language included reading, spelling and writing and lasted one hour and fifty minutes every morning. Math instruction in the dominant language lasted thirty-five minutes. Children

also received ESL, SSL, language enrichment in the dominant language, or reinforcement in English reading for thirty-five minutes in the afternoon. All subjects were taught using performance objectives, which were a combination of previous site-developed objectives plus PIP-introduced objectives. All subjects had a continuum of skills, evaluation materials and specific, keyed materials.

NUEVOS HORIZONTES - SITES E, F, G

PROJECT SUMMARY
1977-1978 and 1978-1979

The original study plan for the evaluation of the PIP dissemination field test was based on four sites for each PIP. When seven sites were actually funded to implement Nuevos Horizontes, it was decided to include all seven in the study, but to select only four for in-depth analysis of data. The remaining three were to be visited on a slightly reduced schedule with a corresponding reduction in the level of data analysis. The selection was made after the first two rounds of site visits. Selection criteria included program size, and extent of implementation. Sites E, F, and G, the less intensively studied sites, are described here.

Although two sites, F and G, were located in or near large metropolitan areas, they differed greatly in size. Site F had only two classes the first year and three classes the second year. Site G had 16 classes the first year and 20 the second year. The third site, site E was rural and had only two classes the first year and three classes the second year. However this site had a concentration of Spanish-surnamed population, which ranged from 10-15% of the approximately 2,500 total area population. The variances were due to the seasonal needs for agricultural labor in the area. In general, this site was a low-income area. Site F was located in one of the most densely populated regions in the U.S. It had identified approximately 1,000 N/LES students in the district during the first year. Site G had a large percentage of Spanish-speaking students. It also had a history of high attrition, high mobility, and low-achievement scores.

Two sites, F and G, did have bilingual/bicultural teachers and aides for both years. Site E had one teacher who was bicultural but spoke almost no Spanish the first year while the other teacher was Anglo and spoke no Spanish. Their aides were bilingual/bicultural. The second year they were able to hire a bilingual T who had taught in another bilingual program.

Site E was very cooperative and the project director was dedicated and hard-working but lacked project management skills. The first year, he spent a lot of time gaining the cooperation of the principal and superintendent, who resented the program, and spent very little time in the two project classrooms. As a result, very little bilingual instruction occurred. Teachers had adequate instructional materials but did not know how to use them. By the second year, the PD gained very strong support from the Superintendent and was able to hire a well qualified, second grade bilingual T. Bilingual instruction occurred in this classroom, but K and 1st continued to have less bilingual instruction.

In site F there was a great deal of difficulty between the PD and principal. While the PD had some knowledge and experience, the principal was in total control and did not allow the PD any decision-making role. They had a bilingual education program but this was because of the principal's desire that the program succeed since it was in her school--not because she believed in or favored bilingual education. The PD resigned after the first year and the principal assumed all the duties of the PD the second year.

Program implementation in Site G was affected by a number of problems. The RMC site visitors received the impression that Nuevos Horizontes was viewed locally as an extension of existing bilingual activities rather than as a distinct, unique project. The PD's position of half-time PIP-project director and half-time district bilingual coordinator reinforced this perception. The PIP project involved 16 classes in four target schools during the first year, and 20 classes during the second year, more than most of the field-test PIP sites with full-time PDs. Given this heavy load, the PD, who was not a highly skilled manager, spent little time in the classrooms. Other complicating factors included personnel changes in the district administration, and early lack of support by some principals. Both of these problems increased the difficulty of obtaining teacher release time and thus affected the cohesiveness of the project and the implementation of project features. Strong resistance to the project from some parts of the community and school board also presented early problems for the project.

By the end of the second year, most of the major problems seemed to be reduced or eliminated. The instructional coordinator, who appeared to be effective, was promoted to PD for the third year of the project. The team-teaching arrangement, in which students spent at least half (more, depending on individual needs) of their time with a teacher who spoke only Spanish, and the remainder with a teacher who spoke only English, had potential as the basis of a successful program.

Site E was cooperative to RMC throughout the two years of the study. However, program implementation was minimal and there was little information available to RMC. Bilingual instruction was never observed, although a lot of time was spent observing in the two project classes.

Site F provided little of the information requested by RMC. However, bilingual instruction was observed there.

It was difficult to meet with the Site G project director, although the instructional coordinator was helpful. There was also difficulty in arranging classroom observations, and the formal observations for the spring 1979 site visit were not done.

Funds were adequate for all sites. RMC did not obtain any significant information on parents and community at any of the three project sites.

SAVOIR - SITE A
PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. Site A is located in a small rural community with a high concentration of French-speaking persons. The school district, also referred to as a parish, was comprised of twelve K-4 elementary schools, two junior high schools and eleven K-12 schools within a wide geographic area. The district served about 9,000 students, about thirty percent of whom were from minority groups, mostly Black. Approximately seventy-two percent of the school population were eligible for free lunch assistance. Over fifty-two percent of the population in the parish were designated LES.

Overview. The district administrative and instructional staffs at this site were generally enthusiastic about bilingual education. Prior to implementation of the PIPs, the State-funded Council for the Development of French in Louisiana (CODOFIL) project had been in existence for the previous five years. It was a K-5, second-language oriented project, designed to foster the revival of the French language and culture in the state. The district had extensive contacts with a nearby bilingual project. During the second year, the CODOFIL project was reinstated in every participating school, thus accomodating the many students who were available for participation but could not be admitted into the bilingual project.

Decision makers. In deciding to apply for a PIP project, Site A was responding to the general community and state-wide interest in reviving the French culture. Although decision makers (DMs) were genuinely interested in obtaining useful ideas for effective bilingual projects, they were also influenced to some extent by the belief that their chances for funding would be improved if they adopted a PIP project. The director of federal programs (DFP) initiated the preliminary contacts with the disseminators (SEAs and TRC representatives). The DFP was the district-level administrator who was most involved and responsible for decisions

related to Savoir. He found the ASK materials, the project orientation materials (POM) and the application materials useful. The POM materials, in particular, were used for presentations of the project to parents and principals. Late in August, the DFP received the PIP materials. All along, he was very actively involved and carried out all of the planning tasks. The superintendent was active in building support for the project.

Project director. The project director (PD) was identified early in the year, but not appointed until mid-July. He had experience as a resource teacher in the district. He was bilingual/bicultural and had understanding of and appreciation for the Acadian and Cajun heritage. He ensured that participants were involved in decision-making processes. The PD, French specialist and English curriculum coordinator worked very closely together. The PD had an excellent relationship with decision makers in the district. He attended conventions, training sessions and workshops and, all along, seemed to have sufficient administrative skills for implementing the project. His initiative was illustrated in integrating the foreign associate teachers in the project and in the schools. On the whole, he did a good job both years.

Project support staff. The English curriculum coordinator (ECC) and the French specialist (FS) had appropriate skills. The ECC was recognized as a master teacher in the district. He visited classrooms regularly, kept the focus of his observations on the students' acquisition of the objectives of the English program, and acted as a resource for the project Ts. The FS coordinated in-service training relevant to the implementation of the program in French throughout both years. She frequently visited classrooms, arranged for workshops or courses in the area of staff development, and also led the sessions and solicited feedback on them. The evaluation was contracted outside the district.

Project instructional staff. In Site A, few French-speaking teachers (Ts) and teacher-aides (TAs) were available. Most of the project Ts and TAs were not functionally bilingual and had no skills in bilingual education. Within the classroom setting, Ts and TAs teamed up with the foreign

associate Ts (certificated in Europe) and depended almost entirely on them for the teaching of the French component of the project. The foreign associates were qualified teachers recruited in France and Belgium by CODOFIL to teach French in Louisiana schools for one- or two-year terms. In the PIP sites, they were responsible for most of the French language instruction. While the foreign associate program is a unique solution to providing skilled, enthusiastic teachers with native French language skills, there are practical difficulties that affected the PIP projects. The transition to the very different classroom and cultural settings of Louisiana, with little time for preparation, was difficult for many of the foreign associates. Together with their support status in the classroom and low pay, these factors affected morale and contributed to the high turnover at the end of each year. During the second year of the project, foreign associate teacher turnover rate was high.

All project Ts, TAs, and foreign associate Ts were committed to the project, and, as the first year progressed, did an adequate job in the classroom. The PD had arranged for credit-bearing college courses in second language teaching for the project Ts. The combination of these courses and the ongoing inservice program noticeably increased their knowledge of bilingual education methods and materials. Before the start of the second year, the site held a four-day workshop in August with two days set aside for participation by consultants from the regional TRC.

Other personnel (regular staff, community, parents). Community involvement was a problem at this site. For eight to nine years, white parents had been removing their children from the public schools, yet they were gradually returning. While many parents were enthusiastic about enrolling their students in the program, active involvement was still difficult to obtain. Additional efforts in this area were planned for the second year of the project. During the second year, the willingness of parents to participate actively in project activities indicated their increased commitment to project goals. As a result, one of the strongest components of the project was in the area of parent involvement. The

meetings of the Parent Advisory Committee (PAC) were well attended and additional efforts were made to ensure that each school had its own separate PAC the following year.

Other resources (materials/equipment, facilities, funds). Few bilingual materials appropriate to the setting were available commercially. The site purchased the curriculum materials from a nearby bilingual project and from the developer site. There was not as much equipment in use as the PIP specified, although the district did have some audiovisual equipment. Project schools were in reasonably good condition. Most classrooms were of the traditional, self-contained type. There were displays in both languages in the classrooms. Project funds were available and adequate during both years operation of the project; by the middle of the first year the PD sought and received continuation funding.

Bilingual materials that reflect the Louisiana French culture were available in large numbers early in the school year.

Plans and constraints. In this site, the CODOFIL regulations specified the availability of the foreign associate teachers and teacher-training services and the new state accountability law included minimum standards that students had to meet before advancing to the next grade. Ts adapted the PIP-specified performance objectives to the state-mandated minimum standards.

Students. In site A, the pool of potential project students was identified on the basis of surveys of language concentration and the interest of principals in having their schools served by the project. Students whose parents agreed were selected to participate in the project. They came from families where the dominant language and cultural orientation were still Cajun. Although some spoke a few words of French, none were fluent or exclusive speakers of French. In all schools, students appreciated the Acadian culture, and there were more students available for participation than the project could accommodate.

Instructional treatment. Project students were grouped for instruction according to academic need in each subject area, not according to language dominance. In this site, the basic instructional approach was for the regular classroom T to develop daily lesson plans following the standard district curriculum. Then the foreign associate T developed lessons in French to complement or reinforce the English-language lessons in all subject areas. The team-teaching approach, characterized by a variety of teaching methods and activities, provided a means whereby students received individualized and personalized instruction.

District policy stressed English reading and mathematics as core subjects; the district had a reading continuum for grades 1-5 for English reading. Project teachers (Ts) in grades 1 and 2 were three-person teams of monolingual English (T), bilingual Cajun-English (TA) and monolingual French-speaking "foreign associate" T. Ts and TAs depended almost entirely on the foreign associate Ts for the teaching of the French component of the project. Students were grouped for instruction according to academic need in each subject area. Six elementary schools and one K-12 unified school participated in the project. There were seven kindergarten, seven first-grade, and seven second-grade classes in this project.

Reading and language arts were not regarded as distinct subjects at this project site. French instruction was closely coordinated with the English language curriculum, which was based on district and state guidelines and on performance objectives. In this site, some of the PIP-recommended materials were used along with the curriculum guides from the developer site and from two nearby preexisting bilingual projects. However the majority of the materials actually employed were developed by the project Ts, TAs and the foreign associate Ts. This site used a combination of whole-class lessons and individual or small group activities.

In grades 1 and 2 instructional time devoted to French approximated ninety minutes daily while the amount of time allocated to English basal reading instruction was ninety minutes, 45-minute lessons twice daily. In grade 2, students received daily reading instruction in both French and English for the entire year.

SAVOIR - SITE B
PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. Site B is located in a rural area near a large city; this region has a high concentration of French-speaking persons. The school district, also referred to as a parish, is comprised of eleven elementary schools, which housed either K-3, 4-6, or K-6 classrooms, three junior high schools, and two high schools. The district served about 9,000 students, sixty-four percent of whom were designated limited English-speaking (LES). Over eighty percent of these LES students were concentrated in the three elementary schools.

Overview. Administrative and instructional staffs at this site were fully supportive of bilingual education. The district had extensive contacts with a nearby bilingual project. The project encompassed the three elementary schools in the district with the highest concentration of LES students.

Decision makers. The most relevant decision-maker was an active supervisor of federal programs (SFP) with experience in bilingual education and some expertise in dissemination. Within the district, he was a powerful administrator through whom all financial matters passed. The superintendent's role was minimal but both he and the SFP felt the need for a bilingual program. Factors influencing their decision to have a bilingual program included the Lau decision and the general community and statewide interest in reviving the French culture. They saw adoption of a PIP project as a way of securing Title VII funds. Various disseminators (in the SEA and TRC) informed the SFP about PIPs, assisted him first with the ASK, then later made available to him xeroxed copies of PIP manuals. Continued TRC contacts, coupled with the help of the Lau Center staff, helped the SFP to acquire the technical information needed for writing a proposal. The SFP was not oriented toward replication, but was concerned about the Office of Education's role in monitoring project implementation. He was very actively involved and carried out many of the planning tasks until the project director was hired late in July.

Project director. The project director (PD), a man of Cajun descent, was previously employed as an administrator in the district transportation department. He had experience as a classroom teacher at the junior high level. He was a life-long resident of the district. While he did not have experience in bilingual education, this did not appear to cause a problem. The PD established a very good relationship with the SFP and with other decision makers, and planned to foster additional involvement on the part of principals during the second year. The PD attended the three-day training session conducted by a consulting firm, and got extensive help from the TRC and SEA consultants. Experienced staff from neighboring districts also helped the PD to a great extent. The PD's initiative is illustrated in the training he provided and in his integration of the 12 foreign associate teachers in the project and the schools. At the end of the first year, he spent a month in Quebec with project teachers attending a summer institute sponsored by the Council on the Development of French in Louisiana (CODOFIL). The PD, in spite of his late involvement with the project, used the ASK materials, the slide tape/cassette, and the poster for pre-service presentations. He found the calendar and the time schedule very useful. He also read the PIP Evaluation Manual and the Practical Guide for Evaluating Achievement.

Project support staff. Support staff roles at this site varied somewhat from the model outlined by the Savoir PIP. One person filled both the English curriculum coordinator (CC) and French specialist positions. He was previously employed as a college professor of French literature but had some background in second language development and school curriculum. He was functionally bilingual. He ordered the curriculum guides from a nearby bilingual project and translated these into English. He also purchased the curriculum guides developed at the original site. He and the PD jointly developed materials reflecting the Cajun language and culture associated with the school district. The project contracted with an outside evaluator.

Project instructional staff. Many of the teachers (Ts) and teacher-aides (TAs) were of Cajun ancestry and their attitudes were generally

positive toward the cultural revival. However, the principals were the ones who determined the level of interest on the part of the Ts. Then, based on such an assessment, these Ts were required to participate in the project. A description of the Savoir project was presented to these selected Ts. Items used in making presentations included the ASK, the slide/cassette tape, which showed teaching personnel how the project operated in the developer site, and the poster written in both French and English.

Only a small number of project Ts and TAs were functionally bilingual. The Ts did have some knowledge of bilingual education methods and they had the ability to select, develop and use appropriate performance objectives, materials and activities to fit their students' needs. TAs were barred by state laws from having any instructional duties.

Within the classroom setting, project Ts and TAs teamed up with foreign associate Ts, (native French-speaking Ts certificated in Europe) and depended almost entirely on these foreign associates for the teaching of the French component. The foreign associates are qualified teachers recruited in France and Belgium by CODOFIL to teach French in Louisiana schools for one- or two-year terms. In the PIP sites, they were responsible for most of the French language instruction. While the foreign associate program was a unique solution to providing skilled, enthusiastic teachers with native French language skills, there were practical difficulties that affected the PIP projects. The transition to the very different classroom and cultural settings of Louisiana was difficult for many of the foreign associates although they adopted quite well. Another factor that contributed to the difficulties was a reluctance by the foreign associates to live in the communities in which they taught. Although they complained about their support status in the classroom and low pay, all of the first-year foreign associates remained for the second year.

Ts and TAs, but not the foreign associate teachers, attended the start-up workshop. In accordance with PIP specifications, the workshop covered a number of broad areas, such as the components of the project itself, the rationale of a program in French and its cultural emphasis,

the performance objectives and their use in monitoring and assessing student achievement, and bilingual materials development. The foreign associate teachers underwent a three-day training session organized by the SEA and a two-day orientation meeting set up by the district. Thus, the specific roles of the Ts, TAs, foreign associates, and the support staff were made clear. Throughout the first year of the project, the PD arranged for monthly in-service training for teaching personnel (including the foreign associates). The district negotiated with local colleges for credit-bearing courses. Good communication was maintained among the project instructional staff throughout.

During the second year, teacher turnover was high at one of the participating schools. This second year, a major attempt was made to provide the foreign associate teacher with local housing; the project benefited by having them agree to live in the community. However, some of them still encountered problems in making the transition to the rural cultural settings of Louisiana.

Other personnel (regular staff, community, parents). Community involvement had not been a problem, except that parents attending the Parent Advisory Committee (PAC) meetings did not know how to get involved in community activities to support and extend the project. However, school programs and activities were well attended by parents and community members. Additional efforts aimed at obtaining more active involvement were planned for the second year of the project.

Other resources (materials/equipment, facilities, funds). The district was reasonably well equipped. There did not seem to be much hardware, although there was a room full of new System 80s at the district office. Little, if any, bilingual material was available until the project staff purchased curriculum materials from a nearby site and curriculum guides from the developer site. In every classroom, foreign associate teachers, project teachers, and Cajun TAs cooperatively prepared materials and planned French lessons that paralleled the English components. Ts and

other project staff also substantially adapted the PIP performance objectives to suit the state-mandated and district standards. Appropriate English materials were available to classroom Ts, but the French commercial materials arrived late in the first term. In this site, it did not appear that Ts had sufficient training to adequately select materials. The site did develop curriculum activities, identify and adapt relevant social studies materials, and develop additional French materials for social studies and other curriculum areas. This was in keeping with what happened at the developer site. However, in the development of test instruments, particularly in French, this site clearly needed more help.

Project schools were in excellent condition. One new school had a modern open design with four open sections (K-3) surrounding an open library/media center. Other schools were older and, in those, the classrooms were of the traditional, self-contained type. In some of the self-contained rooms, the furniture was arranged to form learning centers; in others, the desks were arranged in rows. District offices were adequate, though not attractive, being located in an old school with adjacent portables. The district had a good tax base and regular programs were more than adequately funded. These Ts were the highest paid in the state.

Plans and constraints. In this site, factors other than the PIP determined the direction in which the project developed. The CODOFIL regulations specified the availability of foreign associate teachers and of teacher-training services, and the new state accountability law included some limits on the performance objectives used by the project.

Students. The pool of potential project students was identified on the basis of surveys of language concentration and the interest of principals in having their schools served by the project. Students whose parents agreed were selected to participate in the project. However, the students came from families where the dominant language and cultural orientation were still Cajun. Although some spoke a few words of French, none were fluent or exclusive speakers of French.

Instructional treatment. District policy stresses English reading, mathematics and social studies as core subjects. Project Ts in grades 1 and 2 are three-person teams of monolingual English (T), bilingual Cajun-English (TA) and monolingual French-speaking "foreign associate" T. The T and TA depend almost entirely on the foreign associate T for the teaching of the French component of the project. Students are grouped for instruction according to academic need in each subject area. During the second year there were nine kindergarten, eight first-grade, and eight second-grade classes in this project.

Project students were grouped for instruction according to academic need in each subject area, not according to language dominance. It was the foreign associate teachers' responsibility to present concept development activities in French, thus following up on concept development activities in English as carried out by the classroom teacher. Because of the European educational background of the foreign associate teachers, the PIP-specified method of ordering instruction on the basis of performance objectives was not uniformly applied across schools. A strict separation between the sessions in which English and French were spoken was easily maintained, and no switching back and forth to facilitate understanding was observed except in kindergarten, where such a practice is called for by the PIP. The amount of time spent on French instruction came close to one-third, as specified in the PIP. A team-teaching approach was used in the classroom, which provided students with individualized instruction and a variety of teaching methods and activities. This variety of methods, activities and role models appeared to contribute to a high level of student interest.

Reading and language arts are not regarded as distinct subjects at this project site. French instruction is closely coordinated with the English language curriculum which is based on district and state guidelines and on performance objectives. In this site some of the PIP-recommended materials have been used as have the curriculum guides from the developer site and from two nearby preexisting bilingual projects. However, the

majority of the materials actually employed have been developed by the project Ts, TAs, and the foreign associate Ts. This site used a combination of whole-class instruction and individual or small-group activities.

In grades 1 and 2, instructional time devoted to French is approximately ninety minutes daily. The amount of time allocated to English basal reading instruction is ninety minutes daily, 45-minute lessons twice daily. In second grade, students receive daily reading instruction in both French and English throughout the entire year, although the PIP does not require the addition of French reading until third grade.

SAVOIR - SITE C
PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. Site C is located in a small, rural community with a large concentration of French-speaking persons. The school district, also referred to as a parish, was comprised of eight elementary schools which housed either K-2, K-3, 3-6, or 4-8, and seven high schools which housed 7-12, 4-12, or 9-12. The district served about 8,758 students, about 41% of whom were Black. Approximately 37% of the population in the district were receiving food stamps. Eighty-two percent of the students in the district were designated LES. Three elementary schools participated in the project.

Overview. The district administrative and instructional staffs were enthusiastic about bilingual education. Prior to implementing the PIPs, this site had a Title VII-funded bilingual project. Also, the state-funded Council for the Development of French in Louisiana (CODOFIL) project was in existence in the district for the previous five years. It was a K-5, second-language oriented project, designed to foster the revival of the French language and culture in the state. The district had extensive contacts with a nearby bilingual project.

Decision makers. The first contact regarding bilingual PIPs at this site was between a Title VII project director (PD), later to become the PIP PD, and an OBE representative. The superintendent and the school board were supportive of bilingual education. Besides viewing PIPs as a way to obtain Title VII funds, the decision to apply was influenced by the general community and state-wide interest in reviving the French culture. The regional Training Resource Center (TRC) and the State Education Agency (SEA) staff informed the PD further about PIPs; TRC staff assisted her in writing the proposal. She was very actively involved and carried out most of the planning tasks until she was assigned the position of Savoir PD in the middle of July 1977.

Project director. The PD was of Cajun descent. In addition to her PIP duties, she maintained her previous Title VII position, which had given her bilingual management experience. She had a strong background in bilingual education, having worked as a French bilingual specialist at the elementary and secondary level. She had an excellent relationship with the superintendent and thus was in a position appropriate for directing the project. She was a very effective PD and generated a climate of enthusiasm for the PIP project, both among the project and regular teachers.

Project support staff. The English curriculum coordinator and the French specialist were committed to the project and to bilingual education. Their language skills were sufficient to fulfill their roles in the project. Both were doing a good job and fulfilling their respective roles in the project. The evaluator was a private consultant with experience in bilingual project evaluation. He was based at a nearby university. He performed his job efficiently and was available to the PD for consultations.

Project instructional staff. Very few project teachers (Ts) and teacher-aides (TAs) were functionally bilingual or had skills in bilingual education. Within the classroom setting, project Ts and TAs teamed up with the foreign associate teachers, certificated in Europe, and depended almost entirely upon them for the teaching of the French component of the project. The foreign associates were qualified teachers recruited in France and Belgium by CODOFIL to teach French in Louisiana schools for one- or two-year terms. In the PIP sites, they were responsible for most of the French language instruction. While the foreign associate program is a unique solution to providing skilled, enthusiastic teachers with native French language skills, there are practical difficulties that affected the PIP projects. The transition to the very different classroom and cultural settings of Louisiana, with little time for preparation, was difficult for many of the foreign associates. Together with their support status in the classroom and low pay, these factors affected morale and contributed to the high turnover at the end of each year.

All project Ts, TAs, and foreign associate Ts were committed to the project and were effective Ts. The project Ts' prior experience, current college training, and ongoing in-service program, were the major influences on their instructional roles. The foreign associate teachers' prior European educational background and the district ongoing in-service program were the major influences on their instructional roles. The TAs were barred by state law from having instructional duties. The PIP had no discernible impact on instruction at this site. During the second year, foreign associate T turnover rate was high.

Other personnel (regular staff, community, parents). Community involvement was a problem. For eight to nine years, many white parents, including those of French descent, had removed their children from the public schools, but they were gradually returning. While many parents were enthusiastic about enrolling their students in the program, active involvement was still difficult to obtain.

During the second year, the willingness of parents to participate actively in project activities indicated their increased commitment to project goals. Each school had a Parent Advisory Committee (PAC); the meetings were well attended. Some parents assisted Ts and TAs in classroom activities, and many participated in other project events that supported and extended the project.

Other resources (materials/equipment, facilities, funds). Few bilingual materials were commercially available to the project for this setting. The site purchased the curriculum materials from a nearby bilingual project and from the developer site. Most of the English instructional materials used in project classrooms were already in use in the district. The French specialist developed new French curriculum materials based on the curriculum guides purchased from a nearby bilingual project. Also, he substantially adapted the PIP performance objectives to suit the state-mandated and district standards. There was not as much equipment in use as the PIP specified, although the district had some audiovisual equipment. The project classrooms were large and quite adequate for project instruction.

In some of the classrooms the furniture was arranged to form learning centers; in others the desks were in rows. The PD's, curriculum coordinator's and French specialist's offices were located in a modern building that housed most of the district's special projects. The available space was adequate. Project funds were available and adequate during the first year of operation; by mid-year the PD was seeking continuation funding and prospects for continued support for the second year looked good.

Plans and constraints. In this site, the regulations of the CODOFIL specified the availability of the foreign associate teachers and of teacher-training services. The new state accountability law included some limits on objectives, in that there were minimum standards that students had to reach before advancing to the next grade. Ts adapted the PIP-specified performance objectives to the state-mandated minimum standards.

Students. In this site, the pool of potential project students was identified on the basis of surveys of language concentration and the interest of principals in having their schools served by the project. Students whose parents consented were selected to participate in the project. Participating students spoke a few words of French, but none were fluent or exclusive speakers of French.

Instructional treatment. District policy stresses English reading and mathematics as core subjects. Project Ts in grades 1 and 2 were three-person teams of monolingual English (T), bilingual Cajun-English (TA), and monolingual French-speaking "foreign associate" T. T and TA depended almost entirely on the foreign associate T for the teaching of the French component of the project. Students were grouped for instruction according to academic need in each subject area, not according to language dominance. It was the foreign associate teachers' responsibility to present concept development activities in French, thus following up on concept development activities in English as carried out by the classroom teacher. Because of the European educational background of the foreign associate teachers, the PIP-specified method of ordering instruction on the basis of performance

objectives was not uniformly applied across schools. A strict separation between the sessions in which English and French were spoken was easily maintained, and no switching back and forth to facilitate understanding was observed except in kindergarten, where such a practice was called for by the PIP. In Site C the amount of time spent on French was much less than what was specified in the PIP. A team-teaching approach was used in the classroom, which provided students with individualized instruction and a variety of teaching methods and activities. There were eight kindergarten, eight first-grade, and eight second-grade classes in this project.

Reading and language arts were not regarded as distinct subjects at this project site. French instruction was closely coordinated with the English language curriculum which was based on district guidelines and performance objectives. In this site some of the PIP-recommended materials were used, as had the curriculum guides from the developer site and from two nearby preexisting bilingual projects. However the majority of the materials actually employed had been developed by the T, the TA, and the foreign associate T. This site used a combination of whole class lessons and individual or small group activities.

In grades 1 and 2 instructional time devoted to French approximated sixty minutes daily, while the amount of time allocated to English basal reading instruction was ninety minutes daily (two, 45-minute daily sessions). In grade 2, students received daily reading instruction in English from October through mid-year, then reading instruction in both French and English for the entire year.

SAVOIR - SITE D
PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. Site D is located in a small rural community with a high concentration of persons whose native language is French. The three participating school districts consisted of three elementary schools, two of which housed K-8, while the other one housed grades K-6. Two high schools served these three elementary districts. The districts served about 1,640 students. Fifty percent of the school population was eligible for free lunch assistance. Between fifty to sixty percent of the project children were designated LES.

Overview. District support for bilingual education was strong. The district had previously implemented a Teacher Corps project, which had a positive impact on the development of bilingual education in the state.

Decision maker. The most relevant decision maker was an assistant superintendent who was informed about the PIPs by a professor at a nearby university. The superintendent's role was minimal, but both he and the assistant superintendent felt the need for a bilingual program. Motivation to apply for a PIP project was influenced to some extent by the belief that their chances for funding would be improved if they adopted a PIP project, although they were also interested in obtaining useful ideas for implementing an effective bilingual project. The assistant superintendent went to a nearby university for help in preparing a proposal for Title VII funds. The university personnel had been associated with the Teacher Corps project, knew the TRC staff and were familiar with the PIPs. The assistant superintendent carried out most of the planning tasks and was involved until a project director was hired late in August.

Project director. The project director (PD) came from a bilingual home. She was previously employed as a staff member in a bilingual materials development center in this region. She was aware of project goals, philosophy and features well before she was hired, having attended a PIP

presentation given by a staff member of the Office of Planning, Budgeting and Evaluation the preceding year. She established a very good relationship with the decision makers and quickly became aware of district mechanisms and hierarchy. She sought technical assistance from the university personnel mentioned above. In spite of the fact that she was hired late, she was able to start the project effectively and efficiently. She had a solid knowledge of laws, policies, and guidelines affecting the project. Throughout, she demonstrated a strong commitment to the project and to bilingual education. At the end of the first year of the project, she spent six weeks in Dijon, France, where she attended various training sessions and workshops.

During the second year of the project, the quality of communication among everyone involved remained high. The PD did not have sufficient time available for staff observation; as a result project teachers were not visited on a regular basis. However, the PD organized a comprehensive staff development program.

Project support staff. Support staff roles varied from the model outlined in the PIP. The French specialist, hired by the PD, acted as a demonstration teacher, supervisor of TAs, and resource teacher for the development of French curriculum units. He was working full-time and resigned at the end of the first year. The English curriculum coordinator was also hired by the PD. She acted as a demonstration T, and supervisor of TAs, and was responsible for coordinating the French and English curricula. She also resigned at the end of the first year and the PD had to select replacements for both positions. Both had been doing well in their respective assignments.

The Parent-Community Coordinator directed the preschool program based in the homes of preschoolers themselves; she taught demonstration lessons, supervised TAs and developed curriculum units. In the morning, an additional bilingual specialist acted as a full-time K teacher and in the afternoon served as a resource teacher and supervisor of TAs for Grades 1 and 2 in the third participating school.

During the second year support staff turnover rate was high and the PD allocated a considerable amount of time to fill vacancies and train new staff members. Support staff roles did not vary from the model that was followed last year.

Project instructional staff. In this site, only a small number of participating classroom Ts were bilingual. All of the project TAs were bilingual. A fourth full-time staff member, the bilingual specialist, acted as a K teacher, resource teacher, and supervisor of TAs for grades 1 and 2 in one of the project schools; she was also bilingual. All project Ts and TAs were committed to the project, and as the year progressed, most of them were doing an adequate job in the classroom. The PD had arranged for and was teaching credit-bearing college courses in second-language teaching for the project Ts, and these, as well as the successful ongoing in-service program, noticeably increased Ts' knowledge of bilingual education methods and materials. All of them appeared to be enthusiastic and the project appeared to be having a positive impact on student and staff motivation.

During the second year, teacher turnover rate was very high and the PD allocated a considerable amount of time to fill vacancies and train new teachers.

Other personnel (regular staff, community, parents). While in two of the participating districts, the PIP project enjoyed the full support of the community and the parents, in one participating district parental support was a problem. Some parents in that district did not want to enroll their students in the program, since they viewed any attempt to teach French as increasing the barrier to educational success.

The willingness of participants to become involved in a student exchange program with a nearby French-speaking Canadian elementary school indicated the degree of the commitment of the community to project goals. Such a program represents a unique solution to providing increased opportunities for crossing into a nearby French-speaking Canadian province.

Other resources (materials/equipment, facilities, funds). One major influence at this site was the Exemplary Center for Reading Instruction (ECRI) materials. This site devoted considerable effort into developing French materials corresponding to the ECRI materials. Some commercial materials were also employed in the program, and money was allotted for teachers to buy materials that might be helpful in the design of French units of instruction. Most of the PIP-recommended instructional materials were already in use at this site; the remaining PIP-recommended materials were subsequently purchased, along with the curriculum guide from the origination site, which was not mentioned in the PIPs. Project schools were in good condition. District offices were somewhat crowded, but adequate. Regular programs were adequately funded.

Plans and constraints. In this site, factors other than the PIP were more influential in determining the direction that the project took. Among these factors were: the ECRI program; the newly passed state law on mandatory competency-based testing, which affected instructional objectives and the assessment of student progress; and the guidance received from a nearby university.

Students. The criterion for student selection was that either the father or mother be a French speaker or that French be spoken in the home by other family members. A majority of the students who participated were not actually French speaking. In this site, French was used primarily in language arts and social studies. The amount of time in which French was spoken to students was much lower than the one-third of the day recommended in the PIP.

This site employed ECRI, a mastery learning technique which purported to enhance vocabulary and comprehension skills through the use of written and oral drill. Individual and small work groups were integral parts of the instructional methodology. Students rotated from one station to another throughout the morning, working successively with the regular classroom T, the French T, and the French TA.

Instructional treatment. District policy stresses English reading and language arts as core subjects; in addition to oral skills, students in grade 1 were introduced to reading and writing French. There was very little emphasis on bicultural curriculum or activities. Project Ts in grades 1 and 2 were organized as three-person teams of monolingual English T, TA, and bilingual French-English teacher. There were five kindergarten, five first-grade, and five second-grade classes, and three third-grade classes in the second year of the project.

The methodology used for French reading instruction followed the district's practice for English reading instruction; it was based on ECRI, a mastery learning technique aimed at enhancing vocabulary and comprehension skills through the use of written and oral drill. Individualization and small groups were an integral part of the instructional methodology.

The ratio of French daily instruction to students varied somewhat across schools and ranged anywhere from twenty to thirty minutes. Instructional time devoted to English basal reading instruction was ninety minutes daily. At this project site, first grade students received English reading and French pre-reading instruction for the entire year, while second grade students received reading instruction in both French and English for the entire year.

VENCEREMOS - SITE A
PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. Site A is a small, rural community of 4000 persons of which over half are Chicanos. Fifty-six percent of the students in the district are Chicanos. The district consists of four schools: a preschool and kindergarten school, a first through fifth grade elementary school, a junior high school through grade eight, and a high school.

Overview. This site had a Title VII-funded bilingual project for the previous five years. District support for bilingual education was strong. The PIP project provided funds for continuing the district bilingual education program. In addition, the district had a state-funded bilingual project in grades K-3. The projects operated smoothly both years. The district as a whole was essentially stable and personnel, instructional techniques and attitudes were not subject to major change. The district had a strong emphasis on reading and language development almost to the exclusion of other subjects. The reading program rigidly required students to progress at a set pace.

Decision makers. The superintendent at this site was formerly an administrator at the Venceremos origination site, approximately twenty-eight miles away. This decision-maker was generally familiar with the PIP project management component. Decision-makers felt their chances for a second five-year cycle would be enhanced by participating in a field study of PIPs, yet the district was not really interested in replicating a PIP project. Decision-makers were favorably disposed toward bilingual education and were supportive of the project. The district's curriculum coordinator, a Chicana, was the former Title VII project director and was strongly supportive of the project. The level of district commitment to bilingual education generally and to the existing bilingual project specifically was strong.

Project director. The role of project director was already established in the district from the Title VII project over the preceding five years.

The project director was a Chicana and formerly a bilingual teacher for the district's previous Title VII project. While she had no training or experience in project management, she had functioned as a project-director substitute on a few occasions when the project director was away. The PD was connected to a regional bilingual resource and support network and used that network as a source of information about bilingual education; this participation was an indicator of a strong commitment to bilingual education. Overall, she was an effective project director.

The project director's management style and function were not influenced by the PIP-specified function in any significant way.

Project support staff. The project support staff included a community liaison (CL) and an outside evaluator/staff development consultant (EV/SDC). A PIP-specified instructional coordinator (IC) was not hired by the district because it didn't want to have to absorb another middle-management position when the Title VII funds terminated. The CL position, while not PIP-specified, was a para-professional position that existed in the previous Title VII project and was merely carried over. The same person continued in that role. This person was a very competent Chicana and coordinated the project's parent education activities, mobilized parent volunteers and produced a regular project newsletter. She performed her job very well both years.

The EV/SDC was affiliated with a large private contractor who wrote this site's Title VII-PIP proposal with the expectation that, if funded, they would receive the contract to conduct the project's staff development and evaluation. The EV/SDC was assisted by several persons from the same company; all were very competent, efficient and established good rapport with the project staff. During the second year, the EV/SDC concentrated on training the project staff in instructional-delivery techniques and borrowed extensively from Montessori techniques for math instruction.

The staff configuration and roles of the project's support staff were not influenced in any major way by the PIP specifications and guidelines.

Project instructional staff. Three of the four project teachers (Ts) and all the teacher-aides (TAs) were Chicanas and formerly in the district's previous Title VII project. They were all very competent, experienced and committed bilingual teachers; they did their job very well.

For the most part, these Ts did not regard the PIP favorably and did not use it. During the first year, they resented the weekend and after-school in-service sessions, and, particularly, the development of performance objectives. However, by spring, this negative attitude had subsided. The instructional role of TAs was already established in the district, as were all other project roles. The project TAs performed their job well. Several of the project Ts were attending a nearby university and working on master's degrees in bilingual education.

During the second year, one of the two K Ts took a maternity leave. This T was an English monolingual T who team taught with a bilingual T. The T on leave was replaced by another English monolingual T. As planned, the project expanded into the second grade during the second year. The project T and TA assigned to this grade were trained and experienced bilingual instructors.

The PIP influenced neither the staffing configuration nor the roles of the project's instructional staff. However, the project had funds budgeted for staff development activities and this resulted in required in-service sessions. The focus of this training was not a response to teacher-initiated concern as the PIP recommended; the hiring of the SDC had a direct impact on the Ts because it created additional training sessions and several work sessions devoted to writing performance objectives. To a great extent, the PIP influence of additional staff development activities was superfluous for these experienced and competent bilingual instructors.

Other personnel (regular staff, community, parents). The school principal was not well informed about the project and was not an enthusiastic supporter of it during the first year. The project director

avoided working through the principal unless absolutely necessary. During the second year, the principal attended several orientation/ training sessions for district administrators conducted by the SEA. After these sessions, the PD reported that the principal was better informed and more cooperative and supportive of the program.

The district also operated a state-funded bilingual project; there was frequent contact between the two bilingual projects. About half of the non-PIP project teachers were Chicano, including all the state bilingual project teachers. Some team-teaching between PIP-project and regular teachers occurred. The allocation of a TA to PIP-project Ts created some tension from the regular Ts who had to share a few TAs among them. For the most part, the regular staff was superficially informed about the project and viewed it as compensatory; while they were not enthusiastic supporters, they were not an obstruction. By the end of the first year, some regular Ts acknowledged that the project was serving students whom they could not serve adequately and acknowledged that it made their jobs easier. The regular staff did not influence the operation of the project in any noticeable way.

The parents at the project site had a long history of very active involvement in school affairs. It was not uncommon to have two hundred parents turn out at meetings. For this reason, the district decided to limit the parent representation on advisory committees to one parent per grade level. Parent volunteers were not permitted in the classroom by district policy. A district-wide parent advisory committee (PAC) for bilingual education existed. This PAC reviewed the project proposal and endorsed it. The bilingual PAC met regularly and members were elected by parents, not appointed by the district. A lot of communication flowed both to and from the PAC to the district. During both years, the project conducted parent education workshops that were well attended.

Other resources (materials/equipment, facilities, funds). This project had an abundance of bilingual materials available due to its prior

Title VII project and the district-wide, state-supported bilingual project. In addition to classroom materials, the project director's office was well stocked with a wide assortment of resource and reference materials in both languages. Some of the project classrooms were large and well equipped; however, the district's kindergarten classes (all in the project), located at an old, run-down school--the old Chicano elementary school--were cold and reeked of gas fumes in the winter. The project director's office was almost as large as the principal's; the project had a second classroom-size office shared by the project secretary and the CL. In addition, the project had a teacher's resource/work room that was used by project Ts, parents and the CL for preparing materials. None of the instructional materials or facilities used in the project were PIP-influenced. The majority were already in use prior to this project's existence.

Project funds were allocated in late-summer of the first year; this delay meant some last minute T assignments and created a lot of pressure on the project's start-up and initial operations stages due to late preparation of lessons and curriculum materials. However, the staff's prior bilingual-project experience eased the pressure considerably. In the fall of 1977, the Office of Bilingual Education augmented the project's budget by providing additional unsolicited funds for evaluation, staff development, travel and equipment. This appropriation was intended to allow the site to conform with PIP specifications for the field test. The project purchased a photocopy machine with some of these funds. Since the school previously had to use the high school's copier, the project had a valuable and much needed resource which they willingly shared with non-project personnel. This created considerable goodwill by non-project Ts who made use of the copier.

Plans and constraints. The state education codes as well as state and federal bilingual education rules and regulations were the project's guiding force. The district had no Office of Civil Rights problems. The project derived its direction from the district's prior experience in bilingual education. PIP recommendations and guidelines had no noticeable

impact on the project. There were no OE sanctions for failing to replicate the PIP project.

Students (Ss). The project served grades K-1 the first year. First grade Ss had been in the previous Title VII bilingual project and merely continued on to this project's first-grade bilingual classes. The project expanded to include grade two during the second year. These Ss had two years of prior instruction in a Title VII bilingual program. Teachers and the project director reported that although the Ss had some, albeit limited, English proficiency, they scored low on an English-language proficiency test. They also reported a comparable limited proficiency in Spanish language among the project Ss.

Instructional treatment. The instruction received by the project Ss continued to be guided by the district's experience in bilingual education. The PIP instructional component was vague and generalized, thus the PIP impact on classroom instruction was negligible. For this reason, and because of pressure from some school personnel, all project students received reading instruction in Spanish and English concurrently.

District policy at this site requires that a student progress through a specified number of books in the basal reading program. Students who have not completed all of the readers required at that grade level for the academic year are retained, irrespective of how close to completion they are. The project has abundant current, commercially-available bilingual instructional materials and a well-stocked workroom for preparation of locally-developed instructional materials. Project Ts in grades 1 and 2 were trained and experienced bilingual Ts, with appropriate fluency in both Spanish and English. The Ts conduct all instruction and used TAs to reinforce it. There were two first-grade and two second-grade classrooms in this project.

Reading and language arts are regarded as distinct subjects at this project site. The majority of the students get their instruction in English, although a few students get forty minutes of Spanish reading two

or three times a week; this time block is shared with cultural and creative arts instruction and these subjects are alternately taught during the week but without a regular alternation schedule. In one of the two second-grade classrooms, students get forty-five minutes of Spanish reading instruction daily. Instruction in reading, language arts and math is done in small groups; listening and activity centers are commonly used for most lessons.

The instructional schedules for grade 1 were identical. Students received sixty minutes of English reading instruction in groups and an additional thirty minutes of supplemental reading on a daily basis. They received thirty minutes of math instruction and thirty minutes of language arts instruction daily. As already noted, project students in grade 1 also received forty minutes of Spanish-reading instruction several times a week. The instructional schedules and amount of time devoted to instruction varied to an extent in grade 2. Each of the two classrooms daily had sixty minutes of reading instruction in groups and thirty minutes of spelling and also thirty minutes of math instruction. Students in one classroom got forty-five minutes of Spanish-reading instruction daily, thirty minutes of English oral language three times a week and handwriting the remaining two days each week. The other second-grade classroom devoted thirty minutes daily to English oral language instruction.

VENCEREMOS - SITE B
PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. Site B is a small, semi-rural town with a population of approximately 18,000, of which thirty percent are Chicanos. Over half of the elementary school children in this district are Chicano, and the percentage is steadily increasing. The school district was comprised of three elementary schools, one junior high and one high school.

Overview. This site had a state-funded bilingual education project for the two years prior to Title VII funding. The district was under a federal court order in a school desegregation suit that remained unresolved after a decade. In response to an Office of Civil Rights (OCR) desegregation suit, the district adopted a cluster-school approach to school integration whereby district schools were designated to serve specified grade levels. Thus, one school served all the students in grades K-1 in the district, and so forth. The level of commitment to bilingual education in this district was minimal and guarded. The majority of the project teachers were not bilingual nor trained as bilingual teachers. The project director and the instructional coordinator swapped positions at the end of the first year. This staff change did not disturb the continuity of the project to any appreciable extent.

Decision makers. The district decision-makers were fundamentally conservative and resistant to change. They were proud that they never left the basics. During the first year, the superintendent stated that he was willing to try a Title VII project for one year to see if it would produce results. Although the district was skeptical about bilingual education, they felt that the PIP project, based on an exemplary program, was worth a try. This attitude also prevailed during the second year of the project.

Project director. The project director during the first year was a Chicana with over twenty-one years tenure with the district; she was formerly a bilingual teacher and coordinated the state-funded bilingual project in the district. This latter assignment provided her no release time and actually made few time and administrative demands. With this minor exception, the project director had no prior training or experience in project management. Although she did an adequate job, the non-supportive climate and lack of sufficient bilingual teachers made the project director feel inadequately trained to handle the role. By year's end, the project director had decided to resign this position and assume the role of instructional coordinator for the project, a position for which she was amply qualified and experienced. The PD for the second year had considerable administrative experience; her prior staff development role in the project permitted her to introduce instructional strategies as well.

Project support staff. During the first year, the project support staff included a half-time, instructional consultant (IC) and an outside evaluator/staff development consultant (EV/SDC). The IC had prior administrative experience and was working on a doctorate in education administration at a major state university. She was very competent and supportive of the project; this helped bolster the project director. Her primary functions were to observe instruction, assist in the writing of performance objectives, and assist in conducting parent workshops; her role also included conducting staff training sessions. The EV/SDC at this site was the same person contracted at Venceremos Site A. He was affiliated with the contractor who wrote the site's Title VII proposal with the expectation of receiving the contract for the project's evaluation and staff development components, if funded. This EV/SDC was assisted by several persons employed by the contractor, all of whom were very competent, including the EV/SDC. The project director, however, felt that these persons were not sufficiently available and were providing very few direct services to the project. The primary function of the EV/SDC was project evaluation; the IC conducted most of the staff development activities during the year.

During the second year, the first-year PD assumed the IC role as a full-time position. She continued the same functions performed by the first-year IC yet extended the classroom observations of instruction and provided a considerable amount of direct assistance to project Ts, particularly the second grade Ts. In addition, the IC assisted in the assessment of the appropriate language and level for reading instruction to determine placement of all new children. The project contracted with a different EV the second year; the PD had a greater role in specifying the nature of the evaluation services that the EV provided. The PD had a prior acquaintance with this EV, which helped to ensure a positive and effective relationship between them. The EV was very competent and responsive; he was based at a major university about an hour away from the project site.

Project instructional staff. During the first year, three of the twelve K-1 project teachers (Ts) were Chicanas. Three project Ts were experienced bilingual Ts, of which two were trained as bilingual teachers. The rest of the project Ts were monolingual, yet three had completed a 100-hour language course offered by the SEA to obtain a bilingual endorsement. With one exception, the project Ts were competent and experienced, although not as bilingual Ts. All project Ts were already working in the district. The majority of these Ts were recruited into the project by the school principal with the assurance that they would serve for only one year, at which time they would be relieved by other regular teachers. About half of the project Ts were supportive of the project. At year's end, five of the six K and three first grade Ts left the project.

Each project T was assigned a teacher-aide (TA). All of the TAs were Chicano and bilingual; most of them were committed to the project. One of the twelve project TAs, a Chicano male, was very committed and politically strong; he was very supportive of the project director. In grade 1, three of the six Ts were bilingual; teaming these bilingual and monolingual Ts eased the problem somewhat. The T and TA roles were not influenced by the PIP; they were defined by prior practices in the project site. Resistance by project Ts to writing performance objectives was so strong that

the PD chose to do it for the Ts in a committee comprised of herself, the district curriculum coordinator and the part-time IC. K Ts were not satisfied with the draft of the objectives and became involved in rewriting them and coordinating them with district objectives.

During the second year as the project expanded to the second grade, two of the five second grade Ts were experienced and trained bilingual Ts. These two Ts had previously taught in the district's state-funded bilingual program. Of these five Ts, only one had state bilingual certification; bilingual certification was pending for two of the remaining four Ts.

Other personnel (regular staff, community, parents). The K-1 school principal was alternately supportive and resistive on some issues. By the end of the first year, although he was not committed to the project, he was generally more neutral and mildly supportive of the project director. The other school principal for the second and third grade school was generally more supportive of the project. For the most part, the regular staff was only superficially informed about the project and although generally friendly, they were skeptical about its value.

A parent advisory committee (PAC) for the project was formed and operated, yet its function was largely procedural. There wasn't any evidence of broad-based community or parent support for the project the first year. However, by the end of the second year, there was a noticeable improvement in parent participation on the PAC.

Other resources (materials/equipment, facilities, funds). The majority of the instructional materials used in the project were already in use in the district. Additional materials were purchased with Title VII funds in the latter part of the first year. The Spanish-language materials in use were influenced largely by the SEA's service center which provided technical assistance and staff training to state and federal bilingual projects in the area. The equipment used in the project was already in use in the district.

During the first year, the project director and project secretary (PS) initially shared a small office that had no telephone and could only be entered through the school library or the principal's office. By mid-year, a project telephone was installed and the PS moved into the adjacent library, creating a project outer office. At the beginning of the second year, the project office was moved to a district building that also housed the district curriculum coordinator's office and a variety of county social service programs. This building was located directly across the street from the main district administration building. These project offices were large, well lit, and provide adequate space for the PP, IC, and PS. The project was situated at two of the three district elementary schools. Project classrooms were well equipped and adequate for project instruction.

Project funds were available in mid-July during the first year. This allowed sufficient time for start-up activities.

Plans and constraints. This site had a desegregation court order dating back ten years; in December, 1977, OCR cited the district because it was found to be out of compliance with the Lau remedies.

State educational code and district policy guided the project implementation. Local policies prevented the hiring of appropriate project teachers at the time these teachers were available. The majority of the project Ts were English monolinguals. PIP guidelines influenced the project's staff configuration. They also influenced the conduct of pre-service and in-service workshops. During the first year, the project director used the PIP project management directory to gauge her performance, but not to define her role since in numerous cases the PIP material did not provide sufficient information.

Students. The project served grades K-1 the first year. First grade students (Ss) had been served by the state funded bilingual program the previous year. The project expanded to include grade 2 during the second year. These Ss had two years of prior bilingual education, of which one

year was in the Title VII program. Project staff reported that project Ss were generally more conversant in English than in Spanish, although they lacked proficiency in both languages. All of the project students were LES and, presumably, within a normal range of ability; with very few exceptions they were all Chicanos. They were not from migratory families and thus constituted a very stable student population.

Instructional treatment. The project served all of the district's LES students with assessed limited English-speaking proficiency in grades K-2. Project students were in integrated classrooms yet they received most of their instruction through language-proficiency grouping within the classroom in K and across grade-level classrooms in first and second grades.

Project instruction stressed basic skill development. This emphasis conformed with the district's instructional orientation. Instruction was not influenced in any noticeable way by the PIP. District policy stressed reading as a priority subject area; the district had a reading continuum for grades 1-5 for English reading. Moreover, the district had recently adopted a policy requiring the development of performance objectives; this policy preempted a possible PIP influence of their instructional program.

During the first year, there were six K and six first-grade classrooms in this project. Project Ts were organized into two-person teams that paired a monolingual English and a bilingual Spanish-English Ts. All Spanish language instruction was done by bilingual Ts. In monolingual T's classrooms, TA often initiated and/or reinforced lessons in Spanish. All grouping in subject areas was by ability in most cases. During the second year, there were five K classrooms, six first and five second grade classrooms. First grade project Ts were paired into two-person teams comprised of a monolingual English and a bilingual Spanish-English T. There were two such teams in K and in second grades, respectively. In each of these two grades, one project T functioned within a self-contained classroom.

Reading and language arts were regarded as distinct subjects at this project site. A district-adopted oral language program (LEIR) was used in most first and some of the second grade project classrooms. The majority of the project students received their initial instruction in English and reinforcement in Spanish. In grade 1, project students received an hour or more of Spanish reading and language development as well. Instruction in reading, math and language arts was done in small groups; activity centers were commonly used for most lessons. In grade 1, some of the project students were pulled out to get English reading instruction from a Title I reading specialist during the first year.

Instructional time devoted to language arts varied from a minimum of two hours to three hours and forty minutes daily. Of this, the amount of time allocated to Spanish/English basal reading instruction varied from one hour to one hour and fifty minutes daily. Math instruction varied from twenty minutes daily to thirty-five minutes four days a week.

VENCEREMOS - SITE C
PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. Site C is a small, fast growing community with an annual population growth rate exceeding 13 percent. This expansion is due to industrial and agricultural growth in the area. The school district was comprised of six elementary schools, two junior high schools and one high school. Over 17 percent of the elementary enrollment in the district is Chicano, most of which is concentrated in three of the elementary schools. Chicano enrollment has increased district-wide by over three percent annually in recent years.

Overview. Conditions in this district favored the installation of a bilingual education project. The district had twice attempted to submit a Title VII proposal for funding. The district was generally progressive and had prior contact with the Venceremos origination site. The district had a migrant pull-out program with a well-trained bilingual staff and had a competently staffed evaluation unit. In early fall of the second year, the project director and project secretary quit the project; this action destabilized the management and coordination of the project throughout the first half of the academic year.

Decision makers. None of the district decision makers were bilingual or bicultural. The superintendent was supportive of the project but only nominally involved. The prime movers for project adoption were the district's federal project officer and district evaluator. The district manifested a strong interest in installing a bilingual education project although not necessarily in replicating a PIP project. The level of district commitment to bilingual education generally was strong; the district saw bilingual education as a way of meeting the special needs of a segment of its students.

Project director. The project director hired the first year was a Chicana; she was bilingual and had previously worked for two years as a

curriculum and instructional trainer with the federal training resource center (TRC) in the region. Prior to that, she was a bilingual classroom teacher for several years. She had no specific training or direct experience in project management, although she was generally effective as a project director. Her management style and role were not influenced by the PIP in any significant way. This PD resigned her job in early October, 1978. The PD position was vacant for almost four months; the existing project instructional consultant (IC) attempted to fulfill both the PD and IC roles. Mid-year, a new PD was hired. He was the present IC's husband. Like his predecessor, this PD had no specific training or direct experience in project management. He was formerly a classroom teacher in the district yet had some graduate training and experience in education administration. In spite of this, the district decision-makers regarded him as primarily a teacher and student counselor. His attempts to intervene directly in classroom instruction and his insistence on teacher compliance to his directives alienated him from most of the project Ts. An outside observer, a TRC trainer, reported that this PD pushed too hard and had an abrasive management style.

Project support staff. The project support staff consisted of a paraprofessional community liaison (CL) and a project evaluator (EV). The district initially planned to hire an instructional consultant (IC), as specified in the PIP, but could not find a suitable applicant until midway through the academic year.

The CL was Chicana and bilingual, maintained contact between the project and parents and also acted as a quasi school social worker. This staff position was not PIP specified, yet the CL role for this project was influenced by the role performed by the migrant education project's CL. Thus the CL role was already defined and established in the district. The EV was already employed by the district and was written in as half-time evaluator for this project. He was highly competent and supportive of the project. He also often led the district's proposal writing team efforts and was thus highly knowledgeable of district policies and procedures. He was an important asset and made an important contribution to

the project. His presence and support for the project provided much needed continuity during the second year.

During the second year, a new CL was hired. She was Chicana and bilingual and assumed all the duties of the previous CL. The IC was Chicana and bilingual; she had prior experience both as a bilingual classroom teacher and as a bilingual resource teacher. She performed the dual PD and IC role until mid-year. She was competent and effective with the project Ts.

The staff configuration and roles of the project's support staff were not influenced in any major way by the PIP specifications and guidelines.

Project instructional staff. All of the four project teachers (Ts) during the first year were Chicanas and bilingual. Three of the four were already employed in the district; one of these three worked as a teacher with the migrant program. The fourth teacher was a credentialed T working as an aide, also with the migrant program. None of these Ts were trained as bilingual Ts. Although they were all competent and effective Ts, two of them appeared not to be very committed to the project and resisted the directives of the younger and less experienced project director. These two Ts were participating in a Teacher Corp program to obtain their master's degrees. The other two Ts, particularly the former teacher's aide (TA), were receptive to and welcomed the project director's efforts to assist them. This teacher taught a regular K class in the morning and a bilingual K class in the afternoon. Each of the Ts had a TA who had an instructional role in the classroom. All the TAs were Chicanas, bilingual and were effective in the classroom. One of these TAs was attending college and working towards a credential. Another TA was also a project parent and an officer of the project's parent advisory committee.

The hiring of one project T, the reassignment of another T and the hiring of all the four project TAs was done in late-summer due to late funding. There was very little time in which to prepare adequately for the beginning of school. With the exception of the project director's

guidance to the two receptive Ts, the PIP influence on the Ts' role and instruction was negligible.

During the second year, the project was expanded to include two second grade classrooms. The two additional project Ts were neither bilingual nor bicultural yet both had training in bilingual education. One had several years experience; the other was a brand new, inexperienced T. Both were new to the district. However, both T appeared to be very committed to the project. One in particular was extremely well organized and devoted a lot of additional time to her work. They were both competent and effective Ts.

Other personnel (regular staff, community, parents). The project was located at two schools. One of the principals (P) was initially skeptical of the project. Halfway through the first year, he became supportive, and later was enthusiastic about the project and very supportive, having observed the project Ts commitment and hard work. The other P was generally neutral toward the project, as were the regular Ts at both schools. They were neither enthusiastic nor obstructive of the project. For the most part, the regular staff was only superficially informed about the project. A major source of support for the project came from the district's migrant education project personnel. There was a close and supportive relationship among the migrant and bilingual education staffs at both schools however the cooperativeness by migrant education project management personnel dissipated considerably during the second year.

Many of the parents of children served by the project lived a good distance from the schools. Some still lived year-round in labor camps in the area. Parent participation was limited to a few members serving on the project's parent advisory committee (PAC). The PAC was formed by the PD and CL; its function was largely procedural.

Other resources (materials/equipment, facilities, funds). The English-language materials used in the project were already in use in the

district. The Spanish-language materials used by the project were influenced largely by the project directors' prior experience, and to some extent, by the district's migrant education program. Both project directors were well informed on available materials in bilingual education and drew on this experience to make appropriate selections for the project. PIP guidelines and recommendations did not influence the selection of materials in any noticeable way. The equipment used in the project was already in use in the district.

The project was situated at two of the district's six elementary schools. The six project classrooms were large, well equipped and adequate for project instruction. The PD's, CL's and EV's offices were located in a modern, district building that housed all of the district's special projects. The available space was limited but adequate and compared equally to that available to all the other special projects in the district.

Project funds were allocated in late-summer of the first year. This created staffing problems because the PD, TAs, two Ts, and the CL were not hired until shortly before instruction began.

Plans and constraints. State education code, federal bilingual rules and regulations, and district policy guided the project implementation. The increasing minority enrollment in several of the district's elementary schools caused the district to take voluntary and preemptive moves to prevent segregated schools in the district.

Midway through the first year, the local teachers' union won an agreement that required all middle-management district personnel to convey all directives intended for project Ts as recommendations through the school principal. This action limited the project director's direct-line authority to the project teachers.

There were no Office of Education sanctions for replicating the PIP and the district was only nominally interested in doing so. The PIP

influenced the hiring of TAs, the PD, IC and the EV; it also influenced the number of staff development workshops held but not their content. The PIP impact on classroom instruction was negligible.

Students. All of the project students were presumably within a normal range of ability. With very few exceptions, they were all Chicanos. Thirty-nine percent of the Chicano students in the district were classified as migrants. All of the project students scored low on an English-language proficiency test. Comparable data on Spanish-language proficiency suggests that project Ss varied considerably in their Spanish-language proficiency.

Instructional treatment. The project instruction received by the children stressed oral language development and basic skills. The PIP impact on classroom instruction was negligible. Project Ts in grades 1 and 2 operated self-contained classrooms; they used their TAs to reinforce instruction. A few, unspecified number of project students received the majority of their instruction in Spanish. All grouping was done by ability within language groups. There were two first grade and two second grade classrooms in the project, divided equally among two district schools.

Reading and language arts were regarded as distinct subjects. The majority of project students received their instruction in English. In addition, project students received ESL or SSL instruction, depending on their language proficiency. In grade 1, project students were taught English and Spanish reading. Instruction in reading, language arts and math occurred in small groups; reading instruction was individualized to the extent possible. Activity and listening centers were used extensively at this site. An unspecified, although small number of project students received special reading and, to a lesser extent, math instruction on a pull out basis from the schools' migrant resource room.

Reading instruction in the migrant resource room and in one of the two second-grade classrooms employed the Guzack method of individualized

reading instruction. Instruction in this same grade 2 classroom was organized around student contracts and learning centers.

Instructional time devoted to reading and language arts varied across classrooms and grade levels. In grade 1, thirty minutes were devoted to English reading and 20 to 30 minutes to Spanish reading. Twenty minutes were devoted to ESL or SSL instruction and thirty minutes allocated to math instruction. Math instruction was conducted in either Spanish or English, depending on the students' language proficiency. One of these first grade classrooms devoted fifteen to thirty minutes alternately to penmanship and library visits several days of the week, and fifteen minutes twice a week to Spanish singing.

Altogether, from one hour and twenty minutes to one hour and fifty-five minutes daily were devoted to language arts and reading combined in grade 1. In grade 2, a total of two hours and twenty minutes daily were devoted to language arts and reading combined, daily, with one hour of that time devoted explicitly to reading. Twenty minutes daily were devoted to SSL and to ESL instruction, respectively, and also to English language arts. Twenty-five minutes were allocated for math instruction daily.

VENCEREMOS - SITE D
PROJECT SUMMARY
1977-1978 and 1978-1979

Setting. Site D is a small, rural, mostly unincorporated exurb. Twenty-four percent of the students in the district are Chicanos. The district has three elementary schools, one middle school, one junior high school and one high school. The project school has a Chicano student enrollment of 48 percent, compared to 15 and 25 percent at the two other elementary schools.

Overview. This site had a state-funded bilingual project for the previous two years that extended from K to grade 4. The PIP project installed in the district was a K-3 project the first year and expanded vertically into grade 4 the second year. The project school was an individually guided education (IGE) school and featured team-oriented, individualized instruction. The project staff was competent and the project ran smoothly both years.

Decision makers. The superintendent was supportive of bilingual education and for several years had been gradually preparing the district for installing a bilingual project. He committed district funds to hire two teachers on an extended 210 day contract--25 days more than a regular contract--to prepare instructional materials. Other district decision makers (DMs) were generally supportive of bilingual education. Conditions in the district favored the installation of a bilingual education project, however district decision makers were not very interested in replicating a PIP project. The prospects of increasing their chances for Title VII funding led them to adopt a PIP project.

District DMs chose the Venceremos PIP because of its similarities to the IGE concept already present in the district and because of its perceived match to the characteristics of the student population in the proposed project school. IGE is a team-teaching, democratically-oriented approach to individualized instruction.

Project director. The project director (PD) was a Chicana who was formerly employed as a curriculum and staff development specialist in a large, very progressive and predominantly Chicano-staffed school district in the nearby metropolitan area. While the PD had no prior training or direct experience in project management, she was a strong, enthusiastic administrator and supporter of bilingual education and was very well connected to regional and state support and advocacy networks in bilingual education. She was a very effective PD and created a climate of enthusiasm for the project, both among the project staff and the regular staff. The PD essentially defined her own role; her management style and role were not influenced by the PIP specifications and guidelines to any noticeable extent.

Project support staff. The project support staff included a paraprofessional parent coordinator (PC), a project secretary (PS), a full-time instructional coordinator (IC) and an evaluator (EV) contracted to conduct the project evaluation.

The PC role was not specified in the PIP. The PC was a Chicana, parent of a project student and was very active in school and community affairs. She performed her role as liaison between the project and parents very well. At the end-of the first year, she was offered a position as teacher-assistant (TA) in the project. The PS was Chicana, parent of a project student and very efficient and helpful. The IC during the first year was formerly a regular teacher in the district's middle school and had considerable experience in curriculum development yet had no formal training in/or experience with elementary, bilingual curriculum. She was hired in mid-year and provided some direct instructional assistance to the project teachers yet concentrated primarily on directing staff development activities. In January of the second year, this IC resigned her post and was replaced by the projects' second-grade T. The second-grade position was filled by an experienced bilingual T. She was bilingual and Chicana. She had a bilingual teaching credential and had taught in a bilingual program in the late sixties; her most recent experience was as an ESL teacher in an adult education setting. The EV was a private consultant with

considerable expertise and experience in bilingual education evaluation. He was based in a city one hour away. While he performed his job very efficiently, he was not readily available to the PD for consultation except during specified on-site meetings since he was very overcommitted and busy. He was also contracted to perform the project evaluation for the second year. He coordinated the fall pretesting of project children yet he was unavailable after that. As a consequence, the PD decided to hire another EV to complete the project evaluations. This EV was bilingual and Chicano and was very knowledgeable and competent in the evaluation of bilingual education programs. The PC position was filled by a bilingual Chicana who resigned mid-year. She was replaced by another bilingual Chicana. These PCs assumed all the functions performed by the PC during the previous years. They performed their job efficiently.

The staffing configuration, but not the roles of the project staff, was influenced by the PIP. The PC position was notably not PIP-specified.

Project instructional staff. During the first year all of the four, K-3 project teachers (Ts) were trained in bilingual education. At year's end, all had earned a master's degree in bilingual education. Two of the four Ts were Chicanas; all four were bilingual yet one of them was only moderately fluent in Spanish. All four Ts were experienced bilingual Ts, having taught in the school's state-funded bilingual education project for the previous two years. These four Ts were assigned to be the Title VII project Ts. All four were committed to the project and were effective Ts. A strong feeling of solidarity existed among these Ts, largely as a result of their common endeavors in working toward their master's degrees and their prior years of teaching in the state-funded bilingual education project in the school. Their prior experience and current university training were the major influences in their instructional roles. The PIP had no noticeable impact on classroom instruction.

A teacher-aide (TA) was assigned to each project T. These four TAs were Chicanas and bilingual. One of the TAs was formerly a Title I aide; another TA had been a secretary in the district office; another one had

served as a volunteer and substitute; and the fourth was a new hire. However, all four TAs were hired and assigned to the project after a regular competitive selection and hiring process. All of them were strongly supportive of the project and performed their instructional roles efficiently. Although the TA instructional role was already established in the district, the PIP reinforced this TA role in the project.

The project expanded into the fourth grade during the second year. The fourth-grade T was bilingual and Chicana. She had training in bilingual education and had state bilingual endorsement. She had recently received her teaching credential and this was her first teaching job. Her TA was the projects PC during the previous year.

Other personnel: regular staff, community, parents. The project was located in one of the district's three elementary schools. The principal (P) during the first year was a very dynamic, innovative person who was very supportive of the project. She developed a close working relationship with the PD. This P took a leave of absence during the second year; her replacement was also very supportive of and cooperative with the project staff. Instruction in the project school was team-oriented and the project Ts had considerable contact with the regular Ts. Planning, scheduling and instruction were conducted by grade-level teams in all areas except language arts. In this arrangement, non-project Ts had to evaluate project Ts and vice versa. In general, the regular Ts regarded the project favorably. Initial tensions over the lunchroom and playground duties of the project TAs were readily dissipated when the nonclassroom duties of all TAs were assigned equally. The regular staff influenced the project in a major way because they taught project students in areas other than language arts.

Parent participation by project parents in the district was minimal prior to the project's installation. The project's parent advisory committee (PAC) was formed by the PD and consisted of those parents who attended an initial project briefing by the PD. One day of the pre-service

session was devoted to formulating strategies to increase parent participation. Throughout the first year, the level of parent participation increased as more project parents were recruited. The PC and IC had ongoing contact with the parents and held several parent education workshops. Some parents were involved informally as classroom volunteers. By year's end, evidence of parental support for the project was visible. This level of participation extended through the second year.

Other resources: materials/equipment, facilities, funds. Initially, the majority of the instructional materials used in the project were already in use in the project school. The Spanish-language materials in use were mostly those used in the state-funded bilingual education project in previous years. The project conducted a needs assessment of their curriculum materials and used the findings to guide their purchases of materials for content areas in both languages to fill in the gaps in project materials. The selection of those project materials was also influenced by the SEA's area service center that provided technical assistance and staff training to state and federal bilingual projects in the designated area. Another major influence was the bilingual education program at a nearby university in which the project Ts were enrolled; another influence was the innovative practices of school districts in the region. The PIP recommendations and guidelines were judged by the project Ts to be dated, vague and generally inadequate, and were not used for material selection or to guide instruction. When PIP objectives were compared to existing district performance objectives, the project regarded their scope and sequence and instructional objectives as far superior to those recommended by the PIP. The PIP objectives were correlated with the existing objectives; these performance objectives were then used by project Ts to guide instruction. The equipment in use in the project classrooms was largely already in place in the district.

The project classrooms were quite adequate; all of them were quasi-open classrooms; they were adjacent to regular classrooms and were separated by a partial wall. The project's office was small and a bit crowded but was adequate and well equipped.

Project funds were received in midsummer and permitted adequate time for preparation of in-service workshops. However, the project Ts' previous experience and available materials and lesson plans permitted the Ts to cope well with the hasty start-up and initial operation activities.

In the fall of 1977, the project received an unsolicited allocation of \$35,000 to augment the underbudgeted project funds. These funds were used to hire a full-time IC and a half-time PC, and to purchase office furniture, audiovisual equipment and materials for learning centers.

Plans and constraints. The state education codes, state and federal bilingual education rules and regulations and local district policies and practices guided the project's implementation. The number but not the content of staff development activities was PIP-influenced, as was the project's staff configuration. Otherwise, PIP recommendations and guidelines had a negligible effect on the project. The project derived its direction from the PDe' and the district's prior experience in bilingual education.

Students. The majority of the project students were presumably within a normal range in ability. With few exceptions, they were all Chicano. They were not from migratory families and were thus a stable student population. There were only a few monolingual Spanish-speaking students, yet all the project students scored low on an English-language proficiency test. Project Ts reported that the Ss also were not very proficient in Spanish. The project served grades K-3 the first year. With the exception of incoming students in K and other grades, all 1st through 3rd grade project Ss were previously served by the state-funded bilingual education project in the school. The project expanded into grade 4 during the second year. These students had one year of prior instruction in the Title VII bilingual education program and three years of bilingual instruction in the state-funded program.

Instructional treatment. The project instruction received by project children stressed basic skills development. The PIP impact on classroom instruction was negligible.

At this site all non-bilingual instruction was conducted by grade-level teams. In this arrangement, project students received reading and language arts instruction from project Ts and all other instruction from grade-level teams, which include their project Ts. Project Ts in grades 1 and 2 were experienced, trained bilingual Ts. Project Ts conducted instruction and used their TAs to reinforce this instruction. All grouping of project students was by ability. There was only one classroom per grade level in this project.

Reading and language arts instruction were regarded as a unified subject and conducted in one block of instructional time. With very few exceptions, project students received instruction in English. However, for language arts, all project students received both Spanish and English language arts instruction. This instruction was conducted in small groups; within groups, reading was individualized to the extent possible. Listening and activity centers were commonly used for language arts instruction. A district-adopted reading system, the Peagus system, was used for English reading instruction. Special Title IV funds were available for training Ts and purchasing materials under a Right to Read grant.

Grade 1 devoted one hour and forty minutes to English language arts and one hour and twenty minutes to Spanish language arts instruction daily. Grade 2 devoted and additional fifteen minutes daily to silent reading in English. Both grades 1 and 2 devoted one hour daily to math instruction.

APPENDIX B

FIRST-YEAR ADVISORY PANEL RECOMMENDATIONS

APPENDIX B

First-Year Advisory Panel Recommendations

The advisory panel consisted of ten representatives from the fields of bilingual education and communications. They were chosen to insure that the views from various language groups, different geographic areas, and distinct areas of expertise were represented. A complete list of the panel members will be found in Table B-3. Each panel member is listed as participating in one working committee, but all panel members contributed to the general discussions. The panel met for two days at the close of the first year of the PIP implementation study, and again to review the draft final report. This appendix describes the first meeting, which affected the direction of the second year of the study. The panel also had a major impact on the content and organization of the final report.

The advisory panel comments are summarized on the pages that follow together with summaries of RMC presentations to which the panel responded. Panel members were not always in agreement, so certain statements may represent the views of only one or two people and may contradict other statements.

The panel members tended to consider the problems presented in the broadest application possible and not limit their comments to the much narrower concerns of the study; therefore, not all of the suggestions are within the scope of the study. However, valuable comments were received in the area of PIP revisions and student evaluation. In other areas, RMC recommendations were confirmed.

Panel comments are presented in four sections corresponding to the four subcommittees in which panel members met: Target LEAs, Projects and Practices, Delivery System, and Student Outcome Evaluation. Within each section, the RMC study questions, findings, and recommendations precede the panel comments.

Target LEAs

"Target LEAs" refers to both the LEAs that chose to adopt a project via a PIP and to the pool of LEAs that form the potential market for any future revised PIPs.

RMC Study Questions Addressed

1. To what extent were the projects chosen by the adopters appropriate to those adopters?
2. What factors (context, PIP, and other) influenced implementation of the PIP projects?

RMC Study Findings

In fourteen of the fifteen Spanish-English sites, the linguistic characteristics of the students being served were comparable to those of the originating sites. Many of these students came from homes where only Spanish is spoken, while some came from bilingual home environments. Many were Spanish dominant when they entered school. In one of the fifteen sites, the number of Limited English Speaking pupils was small relative to the total number of students in the project. In the four French-English sites, the students were not fluent in French although French was spoken in some homes. These students differed somewhat from those of the originating site, where more French was spoken.

In many sites, the PIP projects called for resources that were not available at the adopter sites. Such resources included skilled, committed bilingual teachers, as well as project directors experienced in administration and in bilingual teaching.

Most of the adopting LEAs were not receptive to the idea of whole-project adoption. They found it necessary to modify projects to fit district constraints. Because of the way they were selected and the fact that only two languages are involved, the 19 adopter LEAs cannot be considered representative of the total LEA market for bilingual projects.

RMC Recommendation

Market analysis to identify the size and characteristics of the populations to be served as well as the resources available to LEAs for implementing projects should precede the selection of exemplary projects for dissemination.

Panel Recommendations

The panel concurred with the RMC recommendations, but it was stated that even before a market analysis, it was necessary to ask "What do we have to offer?" Concern was expressed over the use of the term "market" as this can be interpreted in a narrow, commercial sense. RMC was using the term to mean any potential user of revised PIPs.

There was consensus among panel members that the PIP format as it existed was not well suited to disseminating bilingual programs of practices, and that substantial changes were necessary. In relation to target LEAs, panel members stated that the PIPs should reflect different contexts. This would mean that the packages, as well as the packaged projects, would be designed to function in a specific type of setting with a specific type of student population. This in turn would have implication for the future dissemination of PIPs. Other suggestions concerning PIP revisions are listed in Table B-2 (under "Delivery Systems"), together with revision recommendations from the other subcommittees.

Panel members disagreed on the most appropriate market for revised PIPs. Some felt the materials should be revised specifically to help newly-funded programs, while others said the market should not be restricted in any way. A final decision on an appropriate market for a revised PIP depends on whether USOE wants to diffuse specific, exemplary projects and practices to LEAs or whether USOE only wants to respond to LEAs' requests for information. A list of information that is frequently requested by LEAs was provided by the panel (Table B-1).

Table B-1

Information Frequently Requested by LEAs

1. Lists of instructional objectives.
2. Strategies to get support from administrators, including lists of good articles on rationale, research project results, different approaches to suit local political climate.
3. Description of the teacher training that is available. Course descriptions that could be offered to local universities, especially of practical courses in the methodology of home language teaching in all subject areas.
4. Description of the training that is available for aides. An aide training manual.
5. Description of state certification requirements and state guidelines.
6. Suggestions for increasing parental participation.
7. Suggestions for getting the public to understand the rationale for bilingual-bicultural education.
8. Lists and descriptions of tests used by bilingual programs.
9. Lists and addresses of Lau Centers, Title VII network centers, and bilingual education organizations.
10. Descriptions of methodology of bilingual education.
11. Lists and descriptions of materials available. Information on how to assess and select an appropriate set of materials for a particular context.
12. Discussion of common pitfalls of bilingual programs and suggestions as to how they might be avoided.
13. Suggestions on how to solve the problems of specific contexts such as:
 - new implementors with monolingual English speaking teachers.
 - new implementors with bilingual teachers.
 - LEAs who wish to upgrade or improve their bilingual program.
 - LEAs where students may be bilingual but underachievers.
 - LEAs where students are fluent-English speakers and a bilingual program is desirable.
 - LEAs with various languages represented.
 - LEAs who experience a continuous influx of students with limited English skills.
 - LEAs with a small number of students with limited English skills at various grade levels.

Projects and Practices

"Projects and practices" refers to existing bilingual education methodology, materials, techniques, and methods of project organization that are potentially available for dissemination.

RMC Study Questions Addressed

1. What kinds of practices or projects should USOE attempt to diffuse and how should these practices be selected?
2. What is the nature of LEA requests for assistance (e.g., identification of effective practices, assistance in complying with regulations, assistance in implementing projects)?

RMC Study Findings

Analysis of the three Spanish-English PIPs showed that the three projects as described in the PIPs, did not differ significantly. The French-English project was unique primarily in the language served. Differences observed among adopter sites could be attributed to contextual conditions and not to PIP-project specifications. The original descriptions of the three Spanish-English PIPs in the ASK differentiated them on the basis of student population characteristics. However, the procedures outlined in the packages did not address these differences.

Adopter sites reported some common problems in their efforts to implement PIP projects. The instructional component of the PIP packages provided general principles, but there was very little specific methodology that was helpful to teachers. Some of the PIP-recommended instructional materials were over five years old at the time of the field test and were judged inferior by teachers when compared with other materials then available. Similarly, some of the features incorporated in the PIP projects were considered out-of-date because they reflected past conditions and regulations.

The prerequisites for adoption specified in the ASK materials, especially a bilingual teaching staff, were not available at some sites. Many sites did not have a well defined student selection procedure that incorporated the use of a language proficiency instrument. The PIP suggestions in regard to student selection were often incompatible with state law.

RMC Recommendations

If separate Spanish-English PIPs are to be disseminated, they should differ in significant ways. For example, different program models could be developed for various types of student populations. Also, models could be developed that take into account that some LEAs have limited resources--such as few bilingual teachers and limited expertise. The packages also need to have more specific information on bilingual education methodology in order to be useful at the classroom level. Since new materials are constantly being developed, it would be more useful to list sources of materials and provide guidelines for assessment and selection rather than recommend specific materials. Specific student selection procedures can be described, but because of various state laws no single procedure can be recommended. It would also be highly desirable to shorten the time span between identification of model projects and their dissemination.

Panel Recommendations

Many of the panel members' comments focused on the need for a better fit between a packaged project and local conditions. For example, they felt different strategies were required for different language groups and for students with different degrees of proficiency. They also felt different strategies should be offered to districts with specific limitations. For example, districts with few bilingual teachers could use a team-teaching model, a roving bilingual teacher, or especially well trained aides. However, it should not be implied that these solutions are preferable to a staff of bilingual teachers. Without exception, panel members opposed whole-project adoption and favored PIP materials that would present a collection of alternatives from which sites could select. Panel members

accepted RMC's recommendations and offered additional suggestions for PIP revision. These comments are summarized in Table B-2, under "Delivery Systems."

Two additional comments were offered by the panel. First, it was suggested that proposal formats be consistent with any project organization system disseminated by USOE. Second, the selection of exemplary projects and/or practices could be improved by involving teachers or other personnel who have recently worked in classrooms.

DELIVERY SYSTEMS

"Delivery systems" refers to all of the people and materials, as well as the organizations and procedures, involved in transporting exemplary projects and practices to target LEAs. The PIPs and the CRCs were the major components of the delivery system examined in this study.

RMC Study Questions Addressed

1. What existing systems were in place that complemented or conflicted with PIP dissemination?
2. What procedures and resources were utilized during dissemination?
3. What influenced adopters to adopt via PIPs?
4. To what extent were the programs selected appropriate to context of the adopter sites?

RMC Study Findings

There was a mismatch between the intended audience for the PIPs and the PIP content. For example, in this tryout, the PIPs were intended for new-start Title VII projects, and yet the PIPs specify levels of staff experience and administrative support not commonly found in new projects.

Users of the PIP manuals commented both on the redundancy of the material and on the lack of specific information. Performance objectives were too general and there was little information on specific instructional techniques. As a result, the credibility of the PIP was marginal.

RMC Recommendations

The audience for PIPs should be differentiated on the basis of prior experience in bilingual education, district size and resources, and

management orientation. A clear understanding of the intended audiences would call for different packaging and dissemination strategies for different audiences.

The dissemination strategy for PIPs should be coordinated with existing information, support, and resource networks in the field of bilingual education.

The packaging design should follow from the overall diffusion system design and should take into consideration different LEA attitudes towards innovation and towards new programs. The probable shelf life of the information should also influence the kind of packaging used. Finally, any packaging effort should consider existing sources of information in order to avoid duplication.

Panel Recommendations

Panel members generally agreed with RMC recommendations; however, they contributed the following additional comments.

A panel member who had worked in the PIP dissemination effort reported that LEAs expected more detailed packages. Therefore, awareness materials that made the exact nature and limitations of the PIPs clear were needed. Panel members also stated that specific curricula was not a realistic goal for the PIPs since each LEA develops its own curriculum and any bilingual education plans would have to be coordinated with local objectives.

The dissemination of PIPs by the TRCs would have profited from increased technical assistance from OBE, as well as specific allocations of time and money for this purpose. TRCs reacted differently to OBE instructions because each TRC made slightly different interpretations of the OBE instructions, served different populations, and had different priorities. Some panel members suggested other organizations or institutions should have been involved, and all agreed that the dissemination effort should be redesigned.

Table B-2

Panel Suggestions for PIP Revisions

- PIPs should be non-language specific. Certain sections of a PIP could be targeted for a specific language such as Spanish or a specific population group such as Native American.
- PIPs should offer collections of alternatives so that LEAs can select locally appropriate or desirable features.
- PIPs should detail legal requirements of bilingual education programs.
- PIPs should be combined. The three Spanish/English PIPs could be merged, or all four PIPs could be combined since the French/English PIP is not substantially different. Needed additions could also be made.
- PIPs should reflect a variety of contexts. Different strategies should be provided for populations with different language characteristics. Strategies should be offered for working under less than ideal conditions--such as a shortage of bilingual teachers.
- PIPs should be resources that include information on teacher training, sources of curriculum, abstracts of relevant research, and information on testing. The PIP could be a link to important resources.
- PIPs should be a series of pamphlets on assessment and management.
- PIP staff development sections should reflect the philosophy that staff training is more effective when occurs on site taking into account local constraints, rather than in an idealized setting.

Panel members reported that LEAs decided to adopt PIPs for many reasons other than the desire to implement a model program. LEAs were motivated by the need to comply with state or federal regulations, the promise of TRC help, or the enhanced prospects of funding. In addition, LEAs had different perceptions of what it meant to adopt and replicate a program. All of these contextual realities should be taken into consideration in future dissemination efforts.

Student Outcome Evaluation

Student outcome evaluation refers to an assessment of project impact on student achievement and attitudes.

RMC Study Questions Addressed

What are the effects of the adopter-site projects on the students?

1. What were the effects on first and second language skills?
2. What were the effects in other subject areas?
3. What were the effects on attitudes and self-concepts?

RMC Study Findings

Since RMC planned to report outcome evaluation data only for the second year of the study, findings in this section referred to the work done by RMC and site evaluators in planning and implementing evaluations.

Technical assistance was offered to all sites in completing the following minimal requirements essential to an interpretable evaluation:

- (1) describing the students, (2) providing meaningful comparison groups, (3) using technically adequate tests, (4) matching tests to curriculum, and (5) using adequate testing dates and scoring procedures. However, nearly all sites had difficulties with certain requirements, such as providing a comparison group.

There were several evaluation problems connected with this study which appeared to have no immediate technical solutions. Only results for kindergarten, first, and second grades were available, even though the projects will eventually expand to third and fourth grade where it may be more reasonable to expect visible results. Then too, there were more problems of reliability and validity with tests given at the lower elementary level. In addition, because of the one-year-at-a-time upward expansion, the second grade results reported actually represented the first year of implementation for that grade. In many projects, goals were not stated in measurable terms and were often unrealistic. The adopter LEAs varied in their prior experience with bilingual education and with their level of implementation. Identifying project effects rapidly became a very complex task.

RMC Recommendations

The 19 sites displayed many differences; therefore, data should not be aggregated across sites. The variance between sites should be a topic of investigation, including the apparent sources of variance and the magnitude of variance. A case study approach seemed the most appropriate way to organize this analysis. Because many sites had small numbers of students, and because there were many confounding variables, there were not enough degrees of freedom to examine variables statistically.

Panel Recommendations

Panel members made the following suggestions: (1) do not report measurement of areas that are not intended project outcomes, (2) describe conditions necessary for an adequate evaluation, (3) compare outcomes of students involved in the program for varying lengths of time, and (4) measure all intended project outcomes.

A number of comments were made in the area of language proficiency testing. Instruments should be based on second language research. Scores should be interpreted critically because the same scores in first and

second language may call for different interpretations. Ideally, testing for production should be done individually but, if this is not possible, listening comprehension tests that correlate highly with production can be substituted. Syntax is the best area of language proficiency to test.

Other ideas for evaluation that were presented were beyond the scope of the present study but are worth considering for future evaluation studies. Suggestions included identifying minimal features for an effective program, identifying "high success" and "low success" projects and analyzing them, and linking features of treatment to outcome.

Another area that RMC did not examine, but that is potentially very interesting, is the effect of the program on the cultural world of the child. Data could be gathered on native language achievement, degree of assimilation and deculturation, retention of family and community values, communication between parent and child, and affective growth. Finally, an analysis could be made of the relationship between academic growth and socio-cultural effects.

Table 3

Advisory Panel Members

Name	Position	Committee Affiliation
1. Helen H. Bernal	Director, Bilingual Education Discipline Head, Our Lady of the Lake University San Antonio, Texas	Student Outcome Evaluation
2. Eduardo Hernández-Chávez	Consultant Concord, California	Student Outcome Evaluation
3. Carlos Cardona-Morales	Program Specialist Washington State Migrant Education Center Sunnyside, Washington	Delivery System
4. Normand Dubé	Director, National Materials Development Center Bedford, New Hampshire	Target LEAs
5. Gustavo González	Director, Bilingual Crosscultural Program Goleta, California	Projects and Practices
6. María Gutiérrez-Spencer	Teacher Training Consultant Silver City, New Mexico	Target LEAs
7. William Paisley	Institute for Communication Research Stanford University Stanford, California	Delivery System
8. Aurea Rodríguez	Program Director • Northeast Center for Curriculum Development Bronx, New York	Projects and Practices
9. Juan Solís	Director, National Center for the Development of Bilingual Curriculum Dallas, Texas	Delivery System
10. Linda Wing	Director, Asian American Bilingual Center Berkeley, California	Target LEAs

APPENDIX C

A DETAILED SUMMARY AND COMPARISON OF PIP CONTENTS

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PROJECT SUMMARY	C-17
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Summary of the Contents of the Four Bilingual PIPs

The history of the development of the four bilingual PIPs is discussed in the Introduction section of this volume. This appendix summarizes the content of the PIPs by comparing the four projects systematically to a model for bilingual project description. The format and organization of the PIPs and the model against which they were compared are described briefly below.

Format of the PIPs. A PIP is a set of manuals containing instructions for implementing a project in a school district. Each manual is designed for a key project staff person or for a particular project function. Theoretically, the PIP manuals provide a comprehensive, detailed description of a model project so that a school district can implement the same project without further technical assistance. A list of the manuals and material found in each PIP appears in Table C-1. The manuals, with some exceptions, were originally contained in a plastic box, reinforcing the idea of a unified package. The Project Orientation Materials were disseminated separately and the Site Developed Materials were too bulky to fit in the box.

The tables of contents from the Nuevos Horizontes-PIP manuals are reproduced by way of example in Table C-2. As can be seen in the table, certain chapters are repeated in several manuals. The Project Management Directory (PMD) is the manual intended for the project director, and it is the lengthiest manual since much of the information included in other staff members' manuals also appears in the PMD. However, the packagers intended the project director to have a complete set of manuals, since the PMD is not a summary of the other manuals.

Table C-1

Manuals Included in the PIPs

	A	NH	S	V
Project Management Directory	X	X	X	X
Project Orientation Materials	X	X	X	X
Project Management Calendar	X	X	X	X
Teacher's Manual	X	X	X	X
Site Developed Materials	X	X		X
Evaluator's Manual	X	X	X	X
Staff Development Manual	X			
Instructional Consultant's Manual	X			
Instructional Consultant/Staff Development Manual				X
Instructional Coordinator's/Staff Development Manual		X		
Manual for the Use of Performance Objectives		X	X	X
Community Coordinator's Manual		X		
French Specialist's Manual			X	
English Curriculum Coordinator's Manual			X	

A - Adelante

NH - Nuevos Horizontes

S - Savoir

V - Venceremos

Table C-2

Sample Table of Contents of a Set of PIP Manuals

PROJECT MANAGEMENT DIRECTORY

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Chapter 2: Using the PIP	13
Chapter 3: Management Approach	21
Chapter 4: Communicating with School and Community	35
Chapter 5: Continuing Beyond the First Year	69
Chapter 6: Budget	75
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Chapter 8: Classroom Implementation	97
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Chapter 10: Staff Development	125
Chapter 11: Staff Relationships	145
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Table C-2 (Continued)

Sample Table of Contents of a Set of PIP Manuals

INSTRUCTIONAL COORDINATOR'S/STAFF DEVELOPMENT MANUAL

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Introduction vi

Chapter 1: Project Overview 1

Chapter 2: The Instructional Coordinator 13

Chapter 3: Instructional Support 21

Chapter 4: Materials/Equipment Development & Selection 33

Chapter 5: Staff Development Overview 63

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Table C-2 (Continued)

Sample Table of Contents of a Set of PIP Manuals

TEACHER'S MANUAL

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Chapter 2: Roles and Relationships 13

Chapter 3: Laying the Groundwork for Classroom Implementation 21

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Table C-2 (Continued)

Sample Table of Contents of a Set of PIP Manuals

MANUAL FOR THE USE OF PERFORMANCE OBJECTIVES

TABLE OF CONTENTS

INTRODUCTION iv

USING THE MANUAL 1

PERFORMANCE OBJECTIVES:

PROJECT OUTCOMES AND PROCEDURES 2

Goals 2

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STUDENT SKILLS 30

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Phonics 35

Mathematics 35

Science 36

Social Studies 38

First Grade 39

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Reading 39

Spelling 41

Mathematics 41

Science 45

Social Studies 46

Second Grade 47

Language Ability 47

Reading 48

Spelling 49

Mathematics 50

Science 53

Social Studies 54

Third Grade 56

Language Ability 56

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Science 62

Social Studies 63

Fourth Grade 64

Language Ability 64

Reading 65

Spelling 66

Mathematics 67

Science 70

Social Studies 71

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Sample Table of Contents of a Set of PIP Manuals

COMMUNITY COORDINATOR'S MANUAL

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Chapter 2: Roles and Relationships 13

Chapter 3: Parent and Community Involvement 20

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Sample Table of Contents of a Set of PIP Manuals

EVALUATOR'S MANUAL

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Model for bilingual project description. The Model for Bilingual Project Description appears in full following this introduction and serves as a table of contents for the summary of the PIPs. The purpose of using a model was two-fold. First, it was desirable to use a system other than the PIP organization which is intentionally repetitive. Second, in comparing the PIPs to a very comprehensive description, areas covered by the PIPs as well as areas not addressed by the PIPs could be discussed systematically.

The Model for Bilingual Project Description was developed over the two years of the study. The model was developed based on staff expertise and the experience of the bilingual PIP field test. Literature from the field of bilingual education was also examined, including similar models that have been developed (Mackey, 1977) and a wide variety of more general current works (see, for example, Center for Applied Linguistics, 1977, 1978). The model is divided into three areas: (1) summary and context; (2) instruction; and (3) management. Each area lists categories to be considered in providing a comprehensive project description. Though it is always somewhat artificial to divide an organic whole like a project into a system of categories, to the extent possible, the model is intended to be systematic and comprehensive.

The organizing headings for the PIP descriptions are the same as the model categories. Each major subheading is followed by a "Discussion" section which frequently includes one or more tables summarizing the content of the four PIPs. The corresponding table numbers appear in parenthesis by the relevant discussion heading. After each discussion, the "Usefulness to adopters" section considers the practical application of the PIP information taking into account the experience of the field test. The "Conclusion" sections, at the end of each group of related headings, make more general and summarizing statements. The model which appears in full also serves as a detailed table of contents.

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AND
DETAILED TABLE OF CONTENTS

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— acceptance	
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1. OVERVIEW OF THE FOUR BILINGUAL PIP PROJECTS

1.1 Summary of Projects

1.1.1 Goals (Table C-3)

Discussion. The stated goals in the PIPs indicate a large degree of similarity among the four bilingual projects. However, there is even more similarity among the implicit goals of the projects which are also included in summary form in Table C-3.

Table C-3

Project Goals

Goals	Stated Goal				Implicit Goal			
	A	NH	S	V	A	NH	S	V
Success in functioning in an English-speaking society	X					X	X	X
Improve achievement in academic subjects	X	X	X	X				
Develop a positive self-concept	X	X	X	X				
Knowledge of/pride in own/US culture				X	X	X	X	
Involve parents, community	X	X	X	X				
Staff development		X			X		X	X
Children need not learn English at expense of academic development	X					X	X	X
Develop listening and speaking skills in both English and native language	X	X	X	X				
Develop reading and writing skills in both English and native language	X	X		X				
Develop reading and writing skills first in English				X				
Equal instructional time in both languages	X	X		X				

A = Adelante; NH = Nuevos Horizontes; S = Savoir; V = Venceremos

Usefulness to adopters. The goals provided in the PIPs represent a fairly comprehensive list of commonly-used goals for bilingual education programs. They are not innovative but they are of some use to inexperienced project directors in program planning. Many goals are overly general and need to be expanded and clarified. For example, it is not clear whether the goal of equal time devoted to each language refers to instructional time only, or to student language use, or to some other factor. It could mean each subject should be divided between both languages or that the day as a whole should be divided.

1.1.2 Target Population (Table C-4)

Discussion. The four projects are primarily designed for students of limited English speaking ability, but the student language characteristics were slightly different for each PIP-project originating site. These differences are reflected in the PIP-specified target populations summarized in Table C-4. The Nuevos Horizontes PIP also mentions selecting under-achieving students, and the other three PIPs state that the funding agency may define the target population.

Table C-4

PIP-Specified Target Populations

Adelante	Nuevos Horizontes	Savoir	Venceremos
Mainly Spanish dominant, but can absorb a few bilingual and English-dominant students	Spanish dominant, bilingual, and English dominant students	Students with background in both French and English	Spanish-dominant students

Usefulness to adopters. The definitions of populations to be served by each PIP project are somewhat misleading. Each PIP describes projects that are generally appropriate for that population, but few population-specific plans are provided. For example, while Nuevos Horizontes is described as a project for monolingual Spanish, monolingual English and bilingual students, the instructional plan does not explain how to organize

a classroom with three distinct linguistic populations. In fact, many of the instructional practices are similar across the four projects.

1.1.3 Grades and Number of Classrooms Served (Table C-5)

Discussion. All the projects as described in the PIPs begin with kindergarten and first grade classrooms and expand vertically one grade per year until fourth grade. (The projects did not evolve in this way in all the developer sites.) The intended sizes of each project vary somewhat based on the size of the origination site. The suggested numbers of students and teachers are summarized in Table C-5.

Table C-5

Number of Classrooms and Number of Students

	Project Year	Adelante	Nuevos Horizontes	Savoir	Venceremos
Teachers (K-1)	1	12	16	16	6-8
Teachers (K-4)	4	30	40	32	16-20
Students (K-1)	1	300	400	400	100
Students (K-4)	4	750	1,000	800	500

1.1.4 Portion of School Day Covered

Discussion. The projects cover all or a major portion of the school day.

Usefulness to adopters. The one-grade-per-year upward expansion design of the PIPs does not reflect what occurred at the origination sites. This model, however, may be helpful to districts inexperienced with bilingual education programs. Field experience showed that adopter sites responded to local conditions and not to PIP directives in selecting the size of their project. The projects are intended to cover the entire school day since, at the elementary level, most students are in self-contained classes. However, the PIPs do not address themselves to the

project students' participation in other special programs or in general school activities, an area of coordination that was necessary at many adopter sites.

1.1.5 Conclusions (Project Summary)

The goals of the bilingual PIPs are similar to the goals of bilingual education in general. The projects do not differ significantly from each other or from general practices common to many bilingual projects. The goals provide a starting point for a district planning its first bilingual project, but it is misleading to think of the four PIPs as offering four distinct approaches. Differences which seem critical at first glance, such as the student population served, lose their meaning because there are no corresponding differences in classroom management and instructional techniques. The student population labels described in each PIP reflect the population at the originating site and do not mean that the project is appropriate only to that group.

1.2 LEA Context

1.2.1 Community Characteristics

Discussion. Each PIP describes briefly the context of the project on which it is based. The student population at three of the originating sites is reported to have low test scores. The majority of the 54% Spanish surnamed student population at the fourth site were described as native Spanish speakers. A high drop-out rate was a demographic feature at one site, and low SES and high mobility were mentioned as significant in another. It seems likely, however, that all of these characteristics were present in some degree at all four originating sites. Two of the projects originated in rural settings, while the remaining two were developed in urban areas.

The Project Selection Guide does not suggest that community characteristics of an adopting LEA should match the context description of the

originating site in any way except in the language characteristics of the students, which are described in the previous section.

Usefulness to adopters. Since community characteristics of adopted sites need not match those of the origination site their inclusion is not helpful and may even be counter-productive. Field experience showed that urban sites were unwilling to adopt projects developed in rural areas, for example, even though there may have been no programmatic reasons for excluding such projects.

1.2.2 LEA Description

Discussion. Each PIP requires different numbers of schools and teachers, which implicitly suggests that larger districts should adopt the larger projects (see Table C-5). However, district size is not specifically discussed. The ASKs have a brief section entitled Capability in which districts are cautioned to adopt a particular PIP only if certain staffing, scheduling, and space requirements can be met. District finances are not discussed in the capability section, but each PIP includes a set of budget sheets from which project costs can be calculated.

The three Spanish/English PIPs require project classrooms to be near one another and administrative offices in the district administration building. The French/English PIP requires classrooms to be available, and administrative offices to be near one another. Adelante, in addition, requires office space for the instructional consultant in the schools. The project director is charged, in all cases, with making the required arrangements.

Usefulness to adopters. Basic information about facilities and number of classrooms required is undoubtedly helpful to project planning, although most sites make their decisions on the basis of local considerations.

1.2.3 Relevant History

Discussion. There is no discussion in the PIPs about coordination of the bilingual projects with existing special projects that may be serving the same population. The desegregation issue, which is of prime concern to school districts and may also affect the same students, is also not discussed.

Usefulness to adopters. Field experience showed the need to include information on coordination with other projects and on OCR regulations.

1.2.4 Adapting to Local Conditions (Table C-6)

Discussion. Adapting to local conditions is discussed briefly in relation to the general use of the PIP, and more specifically in connection with staff selection and with budget. The brief general comments, which are identical in all four PIPs, state that the adopters should be in agreement with the developers on "fundamental philosophy and goals" although "strategies and workable solutions...will differ from site to site."

In the staff selection chapter, a list of skills and talents is offered for consideration in hiring a well rounded staff. The list, which is identical in three PIPs, includes such skills as report writing, materials development, the ability to write objectives and develop criterion-referenced tests, and sensitivity to the needs of all participants. The extent to which project size can be adapted is discussed in each PIP in the budget chapter and is summarized here in Table C-6.

No suggestions are provided for adapting to other conditions, such as high student mobility, lack of bilingual teachers, or students who differ significantly from those at the origination site.

Table C-6

Adaptation of Project Size

	Adelante	Nuevos Horizontes	Savoir	Venceremos
I. Increased Population				
Beginning and final student population suggested by PIP	300 700	400 1,000	400 800	100 500
Extent to which population can be increased	Can add 500 students	Possible, no specified number	Can add 100 students	Unspecified
Additional support staff needed	Add a third instructional consultant	One instructional coordinator for every 400 students	None	Add one instructional consultant; increase evaluator from half to full-time
II. Decreased Population				
Extent to which population can be decreased	150-375 given as an example	Possible, no specified number	400 maximum is given as an example	60-300 given as an example
Suggested staff changes	Staff cannot be combined, but if staff already exist in other positions, they may perform current functions and Venceremos functions	None suggested	Combine English curriculum coordinator and French specialist; share aides	Same as Adelante

Table C-6 (Continued)

	Adelante	Nuevos Horizontes	Savoir	Venceremos
II. (Continued) PIP states project will not be cost effective if stu- dent population is signif- icantly reduced	X		X	X
III. General recommendation on changing project size	OK to add up to 500 students	May be altered but implica- tions on cost, staffing, etc. must be con- sidered	OK to add 100 students. Proj- ect is based on close communi- cation	Extreme expan- sion not recom- mended; small size is a fac- tor in effec- tiveness

Usefulness to adopters. Adapting to local conditions is potentially a very important step in implementing a project from another location. All of the PIPs acknowledge the need to adapt. The section in all the PIPs on hiring a balanced staff even if each staff member does not have all the desirable qualifications is very useful in implementing a project in anything other than ideal circumstances. Information on adaptation of project size is important because it is unlikely that the numbers of students suggested in the PIP are going to coincide exactly with district needs. While all of the PIPs allow some flexibility in project size, their directives are not consistent. For example, why can Adelante add 500 students and Savoir only 100? However, field text experience showed that districts adapted the projects to suit local size requirements, and the PIP directives had limited influence in this area.

1.2.5 Conclusions (LEA Context)

It is difficult to determine what contextual information is necessary to describe a successful project for replication. Certain kinds of information may constrain adopting sites in ways that were not intended, such as urban sites not being willing to adopt programs originating in rural areas. A general rule may be to describe only those aspects of the context that relate to specific project goals and components. For example, if a project originated in an area with high mobility and developed techniques specifically for classrooms with large numbers of students entering and exiting during the year, mobility would be an important contextual criterion for project adoption. By observing this rule, descriptions of the originating PIP sites would omit discussion of features that were not criteria for project adoption.

Directives on adapting to local conditions should receive more importance. Since it was evident from the field experience that much adaptation will occur. Apparent inconsistencies should be corrected or explained.

2. INSTRUCTIONAL APPROACH

2.1 Content of Instruction

2.1.1 Content Areas Covered (Table C-7)

Discussion. The most basic description of a project is a list of the instructional content areas covered. Each of the four PIPs provides a slightly different list of content areas, but they all discuss, however briefly, reading, math, social studies, and language arts. Information about the treatment of these content areas in each project appears in three different forms: general comments in the manuals, instructional objectives, or site developed materials. In some cases information is provided in only one form (health in Nuevos Horizontes); in other cases information is provided in all three forms (social studies in Savoir). Table C-7 is a summary of what content areas are covered across the PIPs.

Table C-7
List of Content Areas

Content Areas	Adelante				Nuevos Horizontes				Savoir				Venceremos			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
<u>Language Arts</u>																
English		*		X					X	X						
French/Spanish				X					X	X						
General													X	X		
Second Language Instruction					X								X			
<u>Reading</u>																
English	X												X	X		
French/Spanish	X			X				X	X				X	X		X
General					X	X										
Math	X				X	X			X				X	X		
Social Studies	X			X	X	X			X	X		X				X
Culture/heritage													X	X		X
Science					X	X										X
Art					X											
Handwriting					X				X							
Health					X											
Spelling					X	X										X
Music									X							

A = General approach to subject discussed briefly.

B = Performance objectives provided.

C = Specific procedures for instruction in content area.

D = Site developed materials provided.

*Adelante performance objectives are part of site developed materials.

Usefulness to adopters. The lists of content areas for each project provided in the PIP manuals are not equally comprehensive across the PIPs. Nuevos Horizontes provides a comprehensive list, Venceremos does not address social studies and science, and Adelante and Savoir only discuss areas of emphasis. Even if a given content area is listed, what is covered under the general heading "Language Arts," for example, may not be specified. Out of all four PIPs, overall objectives, site developed materials, and a discussion of approach are only provided for a total of only three content areas: social studies (Savoir), Spanish reading (Venceremos), and culture and heritage (Venceremos). Even these three areas are treated generally, since specific procedures, except to the extent they are incorporated in site-developed materials, are not discussed for any content area.

Because the discussion of content areas does not include all areas commonly included in the elementary curriculum, project implementers will need additional sources of information.

2.1.2 What Determines Content

Discussion. The basic diffusion question here is, "If an adopter-site follows the PIP guidelines, will students in the adopter site be exposed to the same content as were students in the originating site?" The actual instructional content of a particular project is determined by a combination of many factors, including the role of the teacher, the materials used, and instructional objectives from various sources. The PIP projects allow the teachers a maximum amount of freedom in making daily instructional decisions, as compared, for example, to programmed instruction, in which the teacher makes almost no decisions. (This is discussed in Section 2.2.7.)

Commercial and locally developed materials are specified for all content areas in the three Spanish/English PIPs, and only for social studies in the French/English PIP (these are discussed in Section 2.2.6).

In addition, all of the PIPs provide instructional objectives (these are discussed further in Section 2.1.3). In Adelante, the objectives are imbedded in the site-developed materials rather than listed separately, but the other three PIPs include a separate manual of instructional objectives. The PIPs state that the objectives should be modified by teachers of the adopting sites; Savoir makes this point most strongly, stating that the PIP objectives should only serve as a model.

Usefulness to adopters. There is a fair amount of flexibility in determining instructional content. Although not necessarily a disadvantage, many adopters expected more specific guidelines (congruence with goals, articulation with district curriculum, instructional objectives).

2.1.3 Other Content Features

Discussion. It is important to examine the instructional content of a special project first, for its internal consistency and logic and second, for its articulation with the existing curriculum.

Congruence with goals: At a general level, the content areas discussed are congruent with project goals. For example, Venceremos is the only PIP that has an explicit goal relating to culture and heritage, and consistent with this, the Venceremos PIP provides materials, objectives, and general guidelines for the instruction of culture and heritage.

Articulation with district curriculum: The Savoir PIP states that the adopting district's curriculum should be followed except for the areas modified or supplemented according to the Savoir PIP. The Nuevos Horizontes PIP specifies that the bilingual curriculum should parallel local curriculum. The other two PIPs do not say how the project should relate to local curriculum.

Instructional objectives: Comments from the field tryout reinforce the first impression that the instructional objectives are not uniformly satisfactory. Because the Adelante objectives are imbedded in material,

they do not serve as an overall guide for instruction in an adopter site. The objectives from the remaining three PIPs contain inconsistencies, possible errors, and apparently arbitrary decisions on the part of the packagers. For example, Venceremos reading objectives are given first for Spanish reading and then for reading in English and Spanish without any explanation regarding such a division. Savoir lists only two math objectives in French for the entire year for grade one, although suggested time of instruction is one hour a week. Sometimes a single objective covers a basic skill such as writing sentences; other objectives may cover much smaller pieces of learning such as the past tense of one verb. Some objectives were written in behavioral terms and some were not, even within the same PIP.

Usefulness to adopters. The articulation of a special project with district curriculum is discussed only in the Savoir PIP, but such a discussion is important for any inexperienced project director; however, because of the problems with PIP objectives, in some cases these did not even provide good models.

2.1.4 Conclusions (Instructional Approach)

The content of instruction for each of the projects is not clearly specified by the PIPs. Lists of materials, some discussion about teachers' roles, and objectives for certain subjects provide only general guidelines. Given the elementary curriculum already in existence in an adopting site, such general guidelines can be used to modify and tailor that curriculum to the needs of bilingual students. If the rules are clearly understood, such general guidelines may be extremely helpful to new project directors. However, the PIPs fail to make their own limitations and objectives clear; therefore, field experience showed that many new project directors and most teachers were looking for more specific curriculum guidance than could be found in the PIPs. In any case, it is unlikely that an adopter site would end up with the same content as the originating site, and thus, a major element of the presumably exemplary, originating-site projects would not be diffused via the PIPs.

2.2 Presentation of Content

To assure replication of a model project, it is not enough to describe the instructional content. The methods and techniques of presenting that content should also be described in sufficient detail so that personnel in adopting sites can duplicate these procedures. The following paragraphs summarize PIP directions for each instructional variable.

2.2.1 Instructional Model (Table C-8)

Discussion. All of the PIPs refer to guiding principles that can be termed instructional models. Some of these are general and some refer only to bilingual education. The PIPs vary in how central any particular model is in replicating the projects. For example, cooperative teaching is required in Adelante, but is optional in Nuevos Horizontes and Venceremos. The models referred to in each PIP appear in Table C-8.

Table C-8

Instructional Models

	Adelante	Nuevos Horizontes	Savoir	Venceremos
General Instructional Model	Child-centered classroom Cooperative teaching	Child-centered classroom Optional cooperative teaching	Child-centered classroom Question-answer approach	Child-centered classroom Optional cooperative teaching
Bilingual Instructional Model	Mix of English and Spanish about half and half by end of first grade	Use of both languages on alternate weeks, days, or class periods.	Use of non-English language for relevance to child and enrichment.	Recommended use of both languages on alternate days or weeks by the end of grade one.

Usefulness to adopters. Instructional models are discussed in all of the PIPs. Some are merely mentioned, and others are discussed at greater length but still in general terms. Explanations of how to use these models are not in sufficient detail for a qualified educator to implement them without previous experience. That the PIPs were not designed to give this level of detail is clear when the Nuevos Horizontes PIP recommends attending a workshop on the child-centered classroom if more information is needed. None of the models represents a major innovation. Because of their generality, the models are only useful in planning program theory and not in actual program implementation.

2.2.2 Methodologies for Bilingual Education (Table C-9)

Discussion. The four issues described here must be resolved by any instructional program that uses more than one language (see Table C-9).

- Language of instruction: The PIPs provide percentages for language use, but they also stress flexibility, accepting communication from the child in any language, and introducing concepts in the dominant language. There is no clear resolution of these potentially conflicting directives.
- Approach to non-standard form: All the PIPs stress accepting the language of the child. General guidelines are given for increasing the students' knowledge of standard usage.
- Approach to second language instruction: Language development is a cornerstone of bilingual projects. The PIPs provide general directives, but no specific methodology.
- Approach to reading instruction (Table C-10): An important decision for any bilingual project is deciding in what language students learn to read. Table C-10 summarizes the PIP directives on this subject, which are quite clear. However, two of the PIPs do not state at what point reading instruction should begin in the second language.

Table C-9

Methodologies for Bilingual Education

	A	NH	S	V	Comments
<u>Language of Instruction</u>					
1. language use plan for teacher and student	1	1	1	1	The three Spanish/English PIPs state that equal instructional time in each language is the goal by the end of first grade. The French/English PIP states that the mix should be 2/3 English, 1/3 French.
2. daily instructional time in each language	1	1	1	1	Suggested schedules are given but no detailed plans or criteria for developing a specific, adopter-site schedule.
3. variation for different student groups	0	1	1	1	Beyond the instruction to group students, no variations are given for different student groups in three PIPs. Nuevos Horizontes has schedules for English speakers and schedules for Spanish speakers, but the PIP does not describe what English dominant students do in Spanish reading, for example.
4. criteria for establishing language of instruction	1	1	1	1	The general criterion is to introduce concepts in the language the child understands best and to reinforce in the second language.

Key:

A = Adelante; NH = Nuevos Horizontes; S = Savoir; V = Venceremos

0 = not mentioned; 1 = general comments, guidelines, tips; 2 = comprehensive and specific instructions

Table C-9 (Continued)

	A	NH	S	V	Comments
<u>Approach to Non-Standard Forms</u>					
1. acceptance	2	2	2	2	Stated clearly in all PIPs.
2. form of correction	1	1	1	1	The Savoir PIP instructs teachers to correct students by agreeing with the communication but repeating it in standard English or French. The other PIPs call for pattern drills at a later time.
<u>Approach to Second Language Instruction</u>	1	1	1	1	Although all the PIPs recognize the importance of this area, methods given are very general, e.g., Savoir: "shift emphasis to rural/oral skills," Venceremos: "(teach oral language through) following directions, answering specific questions, using new vocabulary in complete sentences."

Table C-10

Approach to Reading Instruction

PIP	Adelante	Nuevos Horizontes	Savoir	Venceremos
1. Language in which students begin to read	2 Spanish	1 native language (English or Spanish)	2 English	2 Spanish
2. Criteria for beginning reading in second language	1 Some understanding of English	0 Unclear	1 Third grade	1 Middle of first grade

Key:

0 = not mentioned; 1 = general tips; 2 = specific instructions

Usefulness to adopters. Accepting the language of the child is the bilingual education practice which is covered most adequately in the PIPs. It is also one of the simplest practices to explain. Other methodologies and strategies for bilingual instruction are covered so generally that they leave many questions in the reader's mind, as verified by field experience. For example, the general directive to divide instructional time between both languages does not answer the following questions: Which subjects or which portions of subjects should be in which language? How should continuity and switching language be handled? How is the language of the accompanying materials to be treated? Can students respond in any language or should they be required to respond in the language of instruction?

The whole issue of reading instruction is very important in bilingual education, and the PIPs are not clear on issues such as whether readiness should be taught in both languages, and at what point a student should begin to read in the second language. Directives such as students will begin English reading by the middle of first grade need simplification in order to be meaningful in an individualized program. Field experience showed that these were important issues for adopter sites and, in order to make out decisions, they had to consult sources other than the PIPs. The PIPs' discussions of language use assume that all students enter the program in kindergarten or first grade and do not take into account that the problems discussed above may be complicated by recent arrivals at all grade levels.

However, the use of two languages for instruction is a major educational innovation in most districts, and the discussion of methodologies may have some use in program design, within the limitations discussed above.

2.2.3 Specific Methodologies for Each Subject Area

Discussion. The PIPs discuss overall approaches to the content areas listed in Table C-7. Discussion of some subjects may be limited to only one sentence such as the Nuevos Horizontes directive: "For social studies,

each teacher uses textbooks in Spanish from which he or she reads excerpts related to topics in the English text." The longest discussions may involve two or three paragraphs, such as the following treatment of social studies by Savoir:

The project's approach to social studies is original, developed by the staff and is the core of the French program. It is the umbrella for instruction in history, geography, biography, language, sociology, and economics, using an approach that begins with students studying their immediate environment and then proceeding outward:

- Kindergarten - self-image
- First level - environment
- Second level - my town
- Third level - Maine and New Brunswick
- Fourth level - New England, Quebec, Louisiana
- Fifth level - North America

Booklets to teach the topics shown here were generated by the developer site. (A set of these is included in this PIP.)* Adopting projects will have to develop lessons and materials about their own towns. Further, the concept underlying the materials for levels 3 through 5 is that the children should study areas where there are significant numbers of Acadians and French-Canadians, starting with their own area. (For the developer, this was Maine and New Brunswick.) A project in Louisiana, for example, should discuss placing the study of Louisiana in level 3 and should modify the materials as necessary.

Usefulness to adopters. None of the PIPs provided methodology in enough detail to be very useful at the classroom level. The most comprehensive guidelines, such as those for social studies in Savoir, would still require considerable filling in from a knowledgeable and creative teacher. None of the methodologies were innovative, although their application to a bilingual setting may have been. Discussions of methodology may be useful at the general, program-planning level, but they were not useful to teachers.

*There were no K-4 materials in the PIP, only materials for upper grades which were not covered by the PIP.

2.2.4 Rate

Discussion. This category is an important instructional variable consisting of two parts, the pace of instruction and the total time available for each content area.

- Variation in pace. All the PIPs require that the students be grouped along criteria which imply variation in the pace of instruction. Only Venceremos states that students are given mastery tests at the end of each unit and receive additional instruction if they do not pass. The PIPs do not discuss whether the pace is set by the group or by the individual.
- Time on task. The amount of time per day allocated to each content area is discussed under "Schedule." The PIPs do not distinguish the time that the student is actively engaged in producing responses and receiving feedback from the general schedule, which usually includes much "passive" behavior.

Usefulness to adopters. The issue of rate of student learning is either ignored or covered minimally. Because bilingual education gives considerable importance to language learning and to language development, the amount of individual response time could be a significant program feature. In addition, because bilingual education is an alternative program, allowing students to learn at a rate that is more appropriate for them could be extremely important.

2.2.5 Self-Concept Development and Motivation (Table C-11)

Discussion. Improving self-concept is a goal in all four PIPs, but this goal is not attributed to any particular component of the projects. Therefore, this discussion is based on those aspects of the projects that are generally expected to affect the student's self-concept and motivation. Table C-11 summarizes what can be found in the PIPs on this subject.

Table C-11

Self-Concept and Motivation

	A	NH	S	V	Comments
Appropriate content and language of instruction					
1. Using L1 for instruction	1	1	1	1	See discussion of bilingual methodology (p. C-31).
2. Accepting the language of the child	2*	2	2	2	Stressed in all PIPs.
3. Content that relates to students' experience	0	1	1	0	Savoir's "umbrella" social studies plan calls for beginning with the student's immediate world and expanding it. Nuevos Horizontes provides "tips" such as including food normally eaten by the children in a study of nutrition. The other two PIPs do not mention this area.
4. Culturally relevant material	1	1	1	1	Each PIP provides lists of commercial materials and site developed materials, some of which are tailored to the cultural backgrounds of the students.

Key:

A = Adelante; NH = Nuevos Horizontes; S = Savoir; V = Venceremos

0 = not mentioned; 1 = general comments, guidelines, tips; 2 = comprehensive and specific instructions; * = discussion in the PIPs relate this feature to self-concept and motivation

Table C-11 (Continued)

	A	NH	S	V	Comments
Improved affective climate					
1. Placing equal value on both languages and cultures	1	1	1	1	The PIPs stress acceptance of any language the child uses, and they call for instruction in both languages and about both cultures.
2. Insuring student success	1	0	0	1	Adelante calls for providing the child with successful experiences. Venceremos requires the use of mastery tests; students who fail are provided with further instruction.
3. Involving parents	1	1	1	1	All the PIPs discuss parent involvement. Certain areas received detailed attention: e.g., Adelante provides instruction sheets for parents and teachers to work together in the classroom. Field experience indicates more detail was needed for other areas.
4. T as a role model	0	0	0	0	Not discussed in any of the PIPs.
Discipline approach	0	0	0	0	Not discussed in any of the PIPs.
Special rewards system	0	0	0	0	Not discussed in any of the PIPs.

- Appropriate content and language of instruction: The appropriateness of the content is not discussed systematically in any of the PIPs. There are occasional references to it; for example, Nuevos Horizontes states that discussions of nutrition should include the foods normally eaten by the children. Inclusion of the students' culture and heritage is mentioned in all the PIPs. Instruction in two languages is discussed throughout the PIPs, but there are no rules for determining when the use of a particular language is appropriate.
- Improved affective climate: This is a goal in all four PIPs. The desired outcome is discussed (e.g., students should volunteer communications more frequently, students should have a positive self-image) and general guidelines are provided (e.g., accept the language of the child, instruct the child in both cultures).

Discipline approaches and special reward systems are not discussed in the PIPs.

Usefulness to adopters. Some aspects of self-concept development are treated thoroughly, for example, involving parents and determining the language of instruction. Other areas, such as the use of culturally relevant materials, are not treated specifically, although the project as a whole may address these issues. Still other areas, such as special rewards systems or discipline, are ignored completely. The PIPs state the desired outcomes, e.g., a positive self-concept, which seem to be the expected results of the total program. There is nothing innovative in the treatment of self-concept, but the discussion is useful at the program planning level.

2.2.6 Materials (Tables C-12 and C-13)

Discussion. Core materials consist of site-developed materials and recommended commercial materials. Commercial materials are listed in the PIPs with publishers' names and addresses. The three Spanish-English PIPs consider the commercial materials to be an essential part of the project. Savoir lists the commercial materials only for illustration, because the French-English PIP recommends continuing with whatever is currently used in the district. Since material lists for all five grades in the four PIPs would be extremely lengthy, grade two was selected as an example, and the lists of texts for that grade appear in Table C-12. Some of the similarities in materials can be attributed to the effect of the state-approved textbook list on the three Spanish/English Texas sites. Locally developed materials are considered part of the PIP. The materials developed at each site are listed in Table C-13. Appropriateness of the materials is not discussed in any of the PIPs.

Usefulness to adopters. The lists of commercial materials for the Spanish/English PIPs include addresses, price estimates, and, in some cases, quantity needed per class. The lists are not annotated beyond assigning each text to a grade level and a subject area. Therefore, the list is of little use to an adopting site wishing to select books, and unable or unwilling to order everything. Because materials are the part of the program most likely to become obsolete, this section of the PIP did not enjoy usefulness even into the field test period. The site-developed materials are clearly original, but are no more innovative than other similar materials. Some site developed materials contained a larger amount of errors than adopter sites were willing to tolerate. The more experienced adopters often disregarded the material recommendations entirely.

Table C-12
Core Commercial Materials (Second grade)

	Adelante	Nuevos Horizontes	Savoir*	Venceremos
Language Arts	<u>Our Language Today</u> American Book Co. <u>Mi Primera Gram-</u> <u>mática</u> Editoriale Trillas <u>Ejercicios de Len-</u> <u>guage</u> Heffernon's	<u>Teaching English</u> <u>Sounds to Spanish</u> <u>Speakers</u> Allied Educational Council <u>Bilingual Film</u> <u>Strip Program:</u> Imperial Educational Resources	<u>Jacaranda Individ-</u> <u>ualized Language</u> <u>Arts Program</u> Jacaranda Press Language Master Series: <u>Parlons</u> <u>Français</u> ALAP Bell and Howell	Same as Adelante
Reading	Laidlaw Brothers Spanish Reading Series Harper & Row Basic Reading Program <u>Amanecer, El Nuevo</u> <u>Sembrados, Mis</u> <u>Primera Luces,</u> Fernandez editores Basal Reading Series Harcourt Brace, Jovanovich	Laidlaw Brothers Spanish Reading Series <u>Bookmark Reading</u> <u>Program</u> Harcourt Brace Jovanovich	<u>Continuous Progress</u> <u>in Reading</u> Economy Company <u>Reading 360</u> Ginn and Company	Laidlaw Brothers Spanish Reading Series Harper & Row Basic Reading Program <u>Amanecer, El Nuevo</u> <u>Sembrados, Mis</u> <u>Primera Luces,</u> Fernandez editores

*Savoir did not list material by grade level, so this list provides only a sample of books listed and may not reflect actual second grade use.

Table C-12 (Continued)

	Adelante	Nuevos Horizontes	Savoir*	Venceremos
Math	<u>Elementary School Mathematics</u> Addison-Wesley (English and Spanish Versions)	<u>Modern School Math</u> Houghton Mifflin	<u>Elementary School Mathematics</u> Addison-Wesley <u>Individual Progress Instruction</u> Appleton-Century-Crofts	<u>Elementary School Math</u> Addison-Wesley (Spanish Version)
Sample of Other Subjects	<u>Multiculture Social Education Program</u> Southwest Educational Development Laboratory	<u>Basic Goals in Spelling Series</u> McGraw-Hill <u>The Laidlaw Science Series</u> Laidlaw Brothers <u>Contenus en español</u> Kjos		None listed

*Savoir did not list material by grade level, so this list provides only a sample of books listed and may not reflect actual second grade use.

Table C-13
Locally Developed Materials

Adelante	Nuevos Horizontes	Savoir	Venceremos
<u>Mi Ambiente y Yo,</u> Aural-Oral Activity Guide (Spanish and English versions) <u>Spanish Reading</u> <u>Handbook, Levels</u> 1-7 Companion to Laidlaw series <u>Vamos a Platicar,</u> Aural-Oral Activity Guide <u>De Que Platicamos,</u> Aural-Oral Activity Guide <u>Spanish Social</u> <u>Studies Handbook,</u> levels I-III	<u>Bilingual Kinder-</u> <u>garten Instruc-</u> <u>tional Resource</u> <u>Units</u> <u>Basic English</u> <u>Language Patterns</u> <u>for Spanish-</u> <u>Speaking Students</u> <u>Spanish for the</u> <u>Spanish Speaking</u> <u>Student in Ele-</u> <u>mentary Grades</u> 1-6 <u>Spanish Reading</u> <u>Activities</u> companion to commercial text "Mis Primeras Lettras" <u>Supplementary Mate-</u> <u>rial in Spanish</u> <u>for Enrichment</u> <u>Spanish Language</u> <u>Resource Book</u>	<u>Histoire des Acadiens</u> Discussion Charts: "Les patates" "A la maison" "Mon village" "La cabane a sucre" <u>Chez Nous: Ma Famille</u> <u>Chez Nous: Ma Foret</u> <u>Chez Nous: Mon Village</u> <u>Histoire des Acadiens</u> <u>Mon pays: Van Buren</u> <u>Mon pays: Frenchville</u> <u>et St. Agathe</u> <u>Mon pays: Madawaska</u> <u>Histoire des Acadiens</u> <u>Je Voyage en Nouvelle-</u> <u>Angleterre</u> <u>Je Voyage au Canada</u> <u>Je Voyage en Louisiane</u>	Six units for K-2 on these topics-- Pollution and Me, Home and Family, The School, The Farm, The Zoo, and Health and Safety (Spanish and English) <u>Mi Herencia Cultural</u> (K-4 resource book) <u>La Escuelita de</u> <u>Cri Cri</u> (grades K-1) Spanish reading <u>La Historia de</u> <u>Mario</u> (grade 1) <u>Mis Amigos</u> (grades 3-4) <u>Handbook of Ele-</u> <u>mentary Science</u> <u>Experiments.</u> <u>LaCiencia:</u> <u>Experimentos</u> <u>Elementales</u> (Spanish)

2.2.7 Personnel Roles in Classroom Instruction (Tables C-14 and C-15)

Discussion. The role of instructors or the instructional configuration specified by a project may represent major changes. The PIP-specified roles of teachers and others in classroom instruction are summarized in Table C-14. The role of parents in the classroom, the role of the aides, and the involvement of resource staff appear to be the major differences among the projects. Because role descriptions in some PIPs are more detailed than others, it is difficult to judge whether these differences in description represent real project differences or not.

The classroom instructional configurations of the projects are compared in Table C-15.

Usefulness to adopters. The recommended number of teachers and aides and students is clearly defined for each project. Since the teacher aides in Savoir are available by teachers' request, the effect on budgeting and staff selection is unclear. Nuevos Horizontes allows 25 students per class while the other projects allow up to 35 students. Since these numbers are not referred to in any classroom strategy, they probably reflect practices at the originating site. These recommendations were of little or no use to adopters, since local considerations determined class sizes.

Teachers' roles do not appreciably differ across the PIPs. Their role is defined in general terms such as "conduct bilingual instruction." While there is more apparent difference in the roles of aides, parents, and resource staff, this could be a result of the way these roles are described in each PIP. For example, the job description of the aide in Adelante does not include assisting with classroom instruction or reinforcing concepts. Apparently the aides of the Adelante project were not responsible for any instruction to groups, but since this distinction is not explicitly stated in the text, field experience showed little difference in the role of aides role across the four PIP projects.

Table C-14

Personnel Roles in Classroom Instruction

	A	NH	S	V
Teachers				
Conduct bilingual instruction	X	X	X	X
Provide a maximum of individualized instruction	X			X
Administer mastery tests	X			X
Aides				
Assist in classroom instruction			X	X
Reinforce concepts taught by the teacher		X	X	
Tutor individual students	X	X	X	X
Check students work/help evaluate student achievement	X	X	X	
Supervise classroom or recreational activity	X	X	X	
Organize activity areas, distribute materials	X	X		
Read stories to children	X	X		
Parents				
Assist in classroom instruction	X	X*	X	
Tutor individual students				X
Peers				
Resource Staff (ICs, etc.)				
Assist teachers with the transition from instruction in Spanish to instruction in both English and Spanish	X			X
Suggest appropriate instructional strategies	X		X	X
Observe classroom instruction	X	X	X	X

A = Adelante; NH = Nuevos Horizontes; S = Savoir; V = Venceremos

*Optional

Table C-15

Classroom Instructional Configuration

	Adelante	Nuevos Horizontes	Savoir	Venceremos
Suggested Number of Students per Teacher	25-35 students	25 students	25-35 students	25-35 students
Number of Aides	Full-time aide for K; half- time aide for grades 1-4	Half-time aide for each classroom.	Aides optional; available at teacher's request.	Full-time aide for K; half-time aide for grades 1-4.

2.2.8 Conclusions (Presentation of Content)

Instructional methods and techniques are not discussed in detail by any of the PIPs. Guidelines are provided about bilingual instruction such as the use of each language should be equal by the end of first grade. However, anyone attempting to follow these guidelines would need additional instructions that are not found in the PIPs. Desirable outcomes, e.g., a positive self-concept, are discussed but no specific instructions are given for achieving them, other than implementation of the total program. Instructional materials are listed in detail, but the same reasons which made these materials practical in the originating site (e.g., that they were state-adopted texts) may preclude their use in adopter sites from other states. The roles of teachers and other instructors, such as parents and aides, are described, although some of the tasks may be all-encompassing, e.g., "to conduct bilingual instruction." The PIPs' major accomplishment is to provide general information on instructional strategy, and to provide staff configurations and descriptions of roles. Therefore, the packages were more useful to administrators than to teachers, and the PIPs are primarily a management, not an instructional system.

From a diffusion standpoint, even if an adopter could follow the PIP specifications completely, because of the generality of these specifications, the resulting instruction would very likely differ substantially from that in the originating site. Changes in major elements of the projects (e.g., team teaching; basic tests) further exaggerated the differences in the PIP field-test sites.

2.3 Student Selection

2.3.1 Entry Criteria (Table C-16)

Discussion. The general information provided by the PIPs on entry criteria is summarized in Table C-16. Instead of providing specific procedures, three of the PIPs state that procedures must be developed. All the PIPs note, realistically, that state or local policies may influence selection.

Usefulness to adopters. The PIPs correctly state that local procedures may influence student selection. In view of that fact, extensive selection procedures for each PIP would be inappropriate. However, a discussion of student selection issues could have assisted project planners in this very important area.

2.3.2 Exit Criteria

There is no mention of exit criteria or procedures in any of the PIPs.

Usefulness to adopters. Not discussed.

2.3.3 Conclusions (Student Selection)

Student selection is a key issue in designing a successful bilingual project. The issues are not always clear to bilingual education professionals, and an inexperienced project director would need much more guidance in this area than is provided in the PIPs.

Table C-16

Student Selection

	Adelante	Nuevos Horizontes	Savoir	Venceremos
Target Population	Students in schools with high percentages of bilingual children.	Underachieving students of limited English speaking ability.	This may be determined by the funding agency.	Students in schools with large number of Spanish-dominant students.
Entry Criteria*	Student is volunteered by parent.	Teacher-principal judgment. Assessment of language proficiency and of achievement.	Must be decided by adopter.	Student is volunteered by parent.
Entry Procedures	Develop procedures with evaluator. Obtain parental consent.	Develop procedures with evaluator. Obtain parental consent.	Develop procedures with evaluator. Obtain parental consent.	Inform parents, so parents may volunteer students.
Exit Criteria and Procedures	None.	None.	None.	None.

*The PIP notes that state or local policies may influence selection.

2.4 Scheduling

Scheduling refers to the organization of students into groups or classes for defined periods of instruction.

2.4.1 Grouping (Table C-17)

Discussion. Grouping is a requirement in all four projects and the specific PIP directives are summarized in Table C-17. All of the instructions are at the general level indicated by the table.

Usefulness to adopters. The introduction of bilingual instruction complicates the classroom management. The addition of instructional aides and the use of grouping are two means of coping with the increased complexity. The PIPs provide enough information about grouping for general program planning purposes. However, the kind of detail needed by an instructional consultant or a teacher is not present. For example, the three Spanish-English PIPs recommend grouping according to language proficiency, but no assessment procedures or steps are provided.

Table C-17

Grouping

	Adelante	Nuevos Horizontes	Savoir	Venceremos
Basis for Grouping	Language proficiency and achievement.	Language proficiency and achievement.	Performance and need (specifically not language dominance).	Language proficiency and/or achievement level.
Locus of Group	Within and across classes.	Within class. May be across classes.	Within class.	Within class. May be across classes.
Subjects Affected by Grouping	Especially language arts and reading	Not stated.	Each content area.	Usually limited to language arts and reading.
Permanence of Group.	Should change often.	Not stated.	Not stated.	May change often.
Criteria	Not stated.	Test scores, past school records, informal observation.	Mastery of performance objectives.	Teacher observation.

2.4.2 Daily Schedules (Table C-18)

Discussion. None of the PIPs require adherence to a schedule since variation is allowed even in content areas covered. However, all the PIPs provide at least one sample schedule. Table C-18 summarizes the scheduling information provided.

Usefulness to adopters. The PIP schedules represent what occurred at the originating sites, complete with the recess and lunch schedules for those sites. Venceremos offers several examples per grade level, and the content areas may be labeled differently in each example. In some cases there is a general label such as "Language" which does not indicate which language. An additional complication in bilingual education is that different groups may have different schedules, and the same group may have a different schedule of language study at the beginning and at the end of the year. While both these possibilities are mentioned in some of the PIPs, the sample schedules offer no help with these two areas. A simple schedule could be produced by even an inexperienced staff, and it is with some of the complexities of scheduling for bilingual instruction that additional assistance is required.

2.4.3 Conclusions (Scheduling)

The PIP developers apparently did not intend for all adopter sites to replicate the instructional time in any given content area. However, scheduling issues that are peculiar to bilingual instruction should be discussed in greater detail in order for this section to be useful to adopters. Grouping is an important aspect of the bilingual projects described, but specific procedures and criteria are not provided by the PIPs.

Table C-18

Sample Schedule for First Grade

Content Areas	Adelante min/day	Nuevos Horizontes min/day	Savoir ⁵ min/week	Venceremos ⁶ min/day
Language Arts				
English	* ¹			30
French			145	
Spanish				
General		50 ³		
Second Language Instruction				
Reading				
English	70	50		25-30
French				
Spanish	45	50		60
General				
Math	40 ²	25 ⁴	60	30
Social Studies	30		225	20/week
Culture/heritage				30
Science	15			10/week
Art	20		90	20/week
Handwriting	10	15		
Health	10			
Spelling		15		* ⁷
Music	20	15	30	* ⁸
P.E.	20	20		30

1. Language arts time is combined with reading time.
2. Math is taught in English Monday, Wednesday, Friday and in Spanish on Tuesday and Thursday.
3. For language, students are grouped into Spanish monolingual, English monolingual and bilingual.
4. Math is taught in same language on alternate days.
5. Grade is not specified for the Savior schedule; times suggested are for the French curriculum. District schedule is followed for English curriculum.
6. Venceremos offers four different schedules for first grade; only the the first one is included here.
7. Spelling is included in English language arts.
8. Music is included in culture/heritage.

3. MANAGEMENT

3.1 Staff Organization

3.1.1 Staff Members and Time Commitments (Table C-19)

Discussion. The staff members and their time commitments, as described in the PIP, are listed in Table C-19. As the projects expand, part-time positions become full-time and, in the Nuevos Horizontes and Adelante PIPs, additional instructional coordinators are added.

Usefulness to adopters. None of the staffing patterns discussed in this section are unique; in fact, there is a high degree of similarity among the staffs specified in the four PIPs. However, such lists are useful to project directors in program planning. Similarities in staffing patterns reflect standard practices in Title VII projects at the time the originating sites were observed. Since that time, the funding of a national network of materials development centers has reduced the emphasis in curriculum development, which was a large part of the instructional consultant's role.

Differences among staffing patterns probably reflect what actually occurred at the originating sites, and do not seem to be based on differences in program objectives.

3.1.2 Organizational Structure

Discussion. The project director described in the Adelante and Nuevos Horizontes PIPs is a strong leader. The Venceremos and Savoir PIPs offer a more democratic, shared decision-making model. However, Adelante and Nuevos Horizontes staff also have input into decision-making. In all cases, the project director is ultimately responsible for the project. The three Spanish-English PIPs state that the project director is housed in the district administration office thereby conferring a district level status to the position. All of the projects are designed to be located in two or more schools, requiring administrative coordination between schools.

Table C-19

Project Staff*
(For First Year of Project)

Position	Adelante	Nuevos Horizontes	Savoir	Venceremos
Project Director	Full-time	Full-time	Full-time	Full-time
Instructional Coordinator/ Instructional Consultant**	Full-time	Full-time	--	Full-time
Community Coordinator	--	Half-time	--	--
Evaluator	Half-time	Half-time	Full-time	Half-time
English Curriculum Coordinator	--	--	Full-time	--
French Specialist	--	--	Half-time	--
Secretary	Full-time	--	Full-time	Full-time

*Some variation in time commitments as the projects expand to fourth grade.

**The terms differ but the position is the same.

Usefulness to adopters. The structure and tone of an organization have a lot to do with its effectiveness, and this is acknowledged by careful PIP descriptions of what is desired in this area. The problem is that certain results cannot be obtained by simply providing directions. The types of organization established by adopters depend more on local policies and on the people involved than on any instructions given in a PIP-type package.

3.1.3 Qualifications (Table C-20)

Discussion. The PIPs provide lists of qualifications for each staff position. Although the actual positions are similar, if not identical, the qualifications stated in the PIPs differ. A selection of qualifications are compared in Table C-20.

Usefulness to adopters. With few exceptions, the different qualifications that appear in each PIP do not reflect differences in role or responsibility. They probably reflect what was important to originating site personnel. If all the qualifications listed in the four PIPs were combined, that list would be very comprehensive and, as such, potentially helpful to project planners. The qualifications that are included in all four PIPs are optimal, but many districts wishing to adopt bilingual projects cannot match such qualifications. In order to have model projects that are widely applicable, some recognition of these difficulties is essential.

3.1.4 Selection Procedures

Discussion. The PIPs call for the district to hire the project director and the project director to hire other staff in accordance to PIP-specified qualifications. Guidelines are given in all the PIPs about overall staff qualifications and about achieving a balanced staff. The PIPs also state that local hiring policies may prevail.

Table C-20

A Comparison of Selected Staff Qualifications

	A	NH	S	V
Project Director				
Experienced administrator	X	X	X	X
Experienced in curriculum materials planning		X		X
Able to plan and manage budget			X	
Skilled in writing reports	X			
Masters degree or equivalent	X	X		X
Instructional Consultants/Coordinators				
Successful teaching experience	X	X	X	X
Experience in using performance objectives	X			X
Knowledgeable about goals and techniques of bilingual education	X			
Evaluator				
Is bilingual	X	X		X
Teachers				
Are bilingual	X*	X		X
Have bilingual/bicultural background			X	
Teacher Aides				
Are high school graduates	X		X	

A = Adelante; NH = Nuevos Horizontes; S = Savoir; V = Venceremos

*Only required of K-2 teachers

Usefulness to adopters. As anticipated in the PIP suggestions themselves, discussion of selection procedures is not very useful because district hiring procedures are not usually amenable to change.

3.1.5 Conclusions (Staff Organization)

The portions of the PIPs that describe staff organization are helpful at the level of program planning. Suggestions about staff configurations are probably the most useful, but their utility would be increased if the different PIPs offered a real choice of staffing patterns. Discussions of staff qualifications seem to vary arbitrarily across the PIPs and a compilation of all the four PIPs may be more helpful than any single discussion. Organization structure and selection procedures are usually firmly established by each district and are not subject to influence by a PIP.

3.2 Staff Roles

Each PIP describes the various staff members' roles and responsibilities.

3.2.1 Project Director (Tables C-21 and C-22)

Discussion. The role and responsibilities of the project director are extensively described in the Project Management Directory which is designed to be a guide for running the project. The project director's major tasks are very similar across the four PIPs. The project director's role is the most complex and is discussed here by area of responsibility, following the categories of Table C-21.

- Style of leadership: See discussion of organizational structure, Section 3.1.2.
- Funds and budget: All four PIPs devote an entire chapter to the budget. A packet of five worksheets tailored to each project is provided with accompanying explanations. A combined table of contents for this chapter is shown in Table C-22. As shown in the table, there are some topics that are treated in totally parallel fashion and others that are treated only in one PIP.
- Public relations: Communication is one of the constant themes throughout all four PIPs. The Project Management Directory of each PIP has one chapter entitled "Communicating with School and Community" and another one entitled "Staff Relationships." Although the individual recommendations may be worded slightly differently, the message is similar. In addition to the major tasks listed in Table C-21, the project director is given general goals, such as a high staff morale, cooperative relationships among all staff members, and the absence of insoluble conflicts.

Table C-21

Role of Project Director
(As Defined by Major Tasks)

	A	NH	S	V
Funds and Budgets ● seek funding for second-year continuation	X	X	X	X
Public Relations ● involve the parents and community in the project ● maintain the interest of the school board and district officials in the project ● orient school and community to the project	X X X	X X X	X X X	X X X
Administration ● plan the second year ● supervise the planning of evaluation ● arrange for rooms and other facilities ● supervise selection of target schools and students	X X X X	X X X X	X X X X	X X X X
Overseeing Instruction ● monitor instruction ● work with English curriculum coordinator and French specialist to review performance objectives	X	X	X X	X
Staff Training ● supervise the planning and implementation of monthly in-service training ● prepare and supervise a start-up workshop for staff	X	X X	X	X
Developing and Ordering Materials ● work with staff to select and order materials	X	X	X	X
Staff Recruiting and Training ● recruit and select project staff	X	X	X	X

A = Adelante; NH = Nuevos Horizontes; S = Savoir; V = Venceremos

Table C-22

Comparative Table of Contents for the Budget
Chapter of the PMD

Project Goals	4
Project Director's Tasks	4
Budgeting Issues	A, S, V
Sample Schedule of Expenditures	V
Project Costs	A
Start-up Costs	A
Continuation Costs	A
Cost Guidelines	NH
Sample Schedule of Expenditures	NH
Budgeting Procedures	NH
Adapting Costs to Local Conditions	A, S, V
Planning for First Year New Students	A, V
Planning for Expansion	A, V
Sample Schedule of Expenditures, Exclusive of Salaries	A, S
Planning the Second Year	A
Alternative Configurations	A
Budget Worksheets	4
Staff Costs (Worksheet 1)	4
Facilities (Worksheet 2)	4
Equipment/Materials	4
Equipment (Worksheet 3)	4
Materials (Worksheet 4)	4
Locally Developed Materials (Worksheet 4)	4
Total/Costs (Worksheet 5)	4

- 4 = Item appears in all four PIPs
A = Adelante
NH = Nuevos Horizontes
S = Savoir
V = Venceremos

- Administration: Almost everything discussed in the PMDs could fall under this category, but items mentioned here are those not included in other discussions of project director responsibilities.
- Overseeing instruction: Direct responsibility for this task is delegated in all the PIPs to the instructional coordinators, but the project director is ultimately responsible for this area.
- Supervise monthly-inservice training: More detailed PIP content in this area will be discussed under "Staff Development" Section 3.3.
- Developing and ordering materials: Detailed lists of materials are provided in the PIPs and are discussed in Section 2.2.7. General procedures are also provided in some PIPs, such as setting up a system for checking out materials.
- Staff recruiting and hiring: The PMD of each PIP has a chapter devoted to staff selection. Staff qualifications are listed for each position discussed in the PIP. A general section entitled "Adapting to Local Conditions" describes minimal qualifications for the staff as a whole. Three of the PIPs state that local policies may influence hiring of staff. All the PIPs express a preference for teachers who volunteer to be in the program and staff who are already working in the district.

Usefulness to adopters. The project director is the staff person whose role is described in most detail. Task lists are given for each chapter in the PMD, and a calendar is provided showing when each task should be done. There is considerable general discussion about project management and many desired goals or outcomes are defined. For an inexperienced project director, the PMD would be fairly useful in planning and starting a project. It would be difficult for anyone to follow the PMD like a rule book because districts also play a part in the roles and

responsibilities assigned to directors. Nevertheless, even for an experienced project director the PMD could serve as a useful checklist. The PMD does not offer any unique approaches. However, the attempt to organize a project management handbook may be unique and valuable in itself.

3.2.2 Teachers (Table C-23)

Discussion. The function and role of the teachers is not appreciably different across the four PIPs. (Table C-23 compares the roles of teachers and other personnel.) A possible exception may be Savoir where literacy is taught first in English, and the target population may be already bilingual. An apparent difference is the importance given to cooperative teaching in the Adelante PIP. Teachers group students across grades and classes and plan cooperatively, so all students are in the most appropriate group. However, in a less emphatic way the Nuevos Horizontes and Venceremos suggest the same thing, so the difference may only be one of emphasis.

Usefulness to adopters. The teachers' manual, which follows the same general format as the PMDs, was not nearly as useful in the field tryout. This may be because teachers are more interested in instructional guides, materials, curriculum, and objectives, and do not have the interest or time to read general works on their role. The description of teachers' roles was of use, undoubtedly, to the instructional consultants. However, clarification of role differences for different projects or a single definition would be desirable.

3.2.3 Aides (Table C-23)

Discussion. Aides are an important component of bilingual instruction and may represent one of the major changes brought about by the bilingual program. The roles of the aides as described in the PIPs show differences which are not related to different program goals. The proportion of aides to teachers does vary, as can be seen in Table C-15, but the variation does not appear to be related to the aides' function, and therefore seems arbitrary.

Table C-23

A Selective Comparison of Roles of Other Personnel

	A	NH	S	V
Teachers				
• conduct bilingual classroom instruction	X	X	X	X
• develop and use performance objectives	X		X	X
• provide a maximum of individualized instruction	X			X
• develop and administer mastery tests	X			X
• develop instructional materials		X	X	
Teacher Aides				
• assist in classroom instruction			X	X
• tutor individual students	X	X	X	X
• help prepare and reproduce teaching materials			X	X
• help check students' work and maintain students' records	X	X	X	
• reinforce the activity just taught			X	
Instructional Coordinator/Consultant				
• plan and conduct training programs	X	X	X	X
• coordinate parent involvement activities	X		X	
• observe teachers and provide technical assistance	X		X	X
• coordinate curriculum development	X	X		X
• assist with the transition from Spanish to Spanish and English	X			X
Evaluator				
• develop and implement evaluation design	X	X	X	X
• prepare evaluation reports	X	X	X	X
• monitor project implementation	X	X	X	X
• assess progress on objectives	X	X	X	X

A = Adelante; NH = Nuevos Horizontes; S = Savoir; V = Venceremos

Usefulness to adopters. Descriptions of the aides' roles could have shown more consistency across the PIPs or could have represented programmatic differences.

3.2.4 Other staff (Table C-23)

Discussion. The four PIPs have slightly different staff configurations, and the roles reflect that. For example, Nuevos Horizontes has a parent coordinator, while in other projects that role is assigned to the instructional consultant. The role of the evaluator, as described in the evaluator's manual, is identical across the four PIPs.

Usefulness to adopters. The instructional coordinator, community coordinator, and evaluator were each provided with a PIP manual of their own. Their roles were thus defined for them, as well as for other project staff, such as the director. Assuming that the role, as described in the PIP, is congruent with the role of the corresponding staff member in an adopting site, it is very useful for staff members to have a clear understanding of their role.

3.2.5 Conclusions (Staff Roles)

The definition of staff member roles and responsibilities is one of the most useful contributions of the PIPs. A person with no experience in bilingual projects would undoubtedly find the detailed job descriptions useful. Possibly, the selection of a good staff and a clear definition of areas of responsibility would solve many aspects of project implementation.

When the discussions of staff roles are compared across the PIPs, the differences between them appear arbitrary, and any one is probably as helpful as the next. In addition even general guidelines, such as staff configurations, are subject to change over time. Requirements for evaluation change with the legislatures. Materials development may be important at one point, and five years later it may be unnecessary. Finally, the PIPs do not truly consider context. The decision makers in a district

would have to accept and authorize the PIP roles in order for them to work. This makes the PIP still useful as a reference, but not as a step-by-step instruction book.

3.3 Staff Development

3.3.1 Needs Assessment

Discussion. None of the PIPs directly discuss assessing existing staff skills. The PIPs do suggest that staff be given the opportunity to evaluate the project in-service sessions and to make suggestions for future workshops.

Usefulness to adopters. Needs assessment is not treated in the PIPs; its absence may affect the usefulness of other sections.

3.3.2 Structure of Training (Table C-24)

Discussion. Detailed schedules of topics are provided for the start-up workshop. The schedule in the Savoir PIP is particularly complete and provides goals for each workshop activity. However, workshop content is not discussed in detail. In many cases, the PIPs suggest finding a consultant to teach a topic. Thus, adopter-site workshops may differ substantially from those in the originating sites. Treatment of in-service workshops and other staff development activities is even more general and varies across the PIPs (see Table C-24 for a summary).

Usefulness to adopters. The provision of a complete start-up workshop schedule is very useful to inexperienced project directors. Even if adopting districts judge that certain sections of the workshop are not needed, it may be easier to revise the existing plan than to create a new one.

3.3.3 Characteristics of Training

Discussion. None of the PIPs discuss modifying in-service sessions according to teacher experience. Only Venceremos specifically states that aides and teachers should occasionally be offered separate training. Many opportunities are provided the teachers and aides (e.g., in the start-up

Table C-24

Staff Development

	Adelante	Nuevos Horizontes	Savoir	Venceremos
Level of detail provided on start-up workshop schedule	Hourly Schedule	Hourly Schedule	Hourly Schedule	Hourly Schedule
Level of detail on inservice workshops	Topics suggested; one sample plan provided.	Topics and format suggested.	Topics suggested.	Topics suggested; one sample plan provided.
Other staff development activities suggested				
University Courses	X		X	
District Inservice		X		X
Conferences	X			
Visits to other classes, projects	X	X	X	X
Videotaping of teachers	required	suggested	suggested	suggested
Aides receive separate inservice				X
Non-project staff included in start-up or inservice workshops:				
Teachers			X	X
Principals	X			X
Parents	X			
District personnel			X	

workshops) to teach model lessons, plan together, or make materials. The Adelante PIP suggests that about half of the workshop time should be devoted to "hands-on" activities. In addition, all the PIPs state that teachers should suggest topics for future in-service workshops. Adelante and Savoir mention that teachers and aides should be encouraged to pursue credit courses, and Venceremos and Nuevos Horizontes mention making use of available district workshops.

Usefulness to adopters. The greatest weakness of the staff development program discussed in the PIP is that no distinction is made between audiences with potentially very different training needs such as (1) experienced bilingual teachers and inexperienced teachers, (2) fluent Spanish or French speakers and persons who need additional language skills, and (3) teachers and aides. The type of training suggested is practical and user-oriented. The information provided in the four PIPs collectively about university courses and other sources of training is fairly comprehensive, but no one PIP has all of the information.

3.3.4 Audiences

Discussion. Staff development, as discussed in the PIP, includes only teachers and aides, not the director and project support staff. Non-project staff invited to workshops is summarized in Table C-24.

Usefulness to adopters. It would be more helpful to adopting districts to differentiate the audience for staff development according to need, skills, and role. The PIPs do provide useful reminders to include non-project staff in training activities, but the suggestions of who to include vary across the PIPs without apparent reason.

3.3.5 Conclusions (Staff Development)

Staff development is a major component of bilingual education and justifiably receives a large amount of attention in the PIPs. Enough detail on topics is provided, at least for the start-up workshop, to be

quite useful to project directors. However, the specific contents and procedures of training must be determined by the adopter-site. The PIPs do not consider the diverse training needs of the staff.

3.4 Parents and Community

3.4.1 Parent Involvement in School Affairs (Table C-25)

Discussion. All the originating sites were subject to the same requirements to involve parents in project activities. However, the activities described varied across the PIPs. For example, parents clearly assist in the classroom only in Adelante and Savoir. Table C-25 is a summary of the parent involvement component described in each PIP.

Usefulness to adopters. The usefulness of this section depends on which PIP is discussed. Venceremos has very little on parent involvement, Adelante has somewhat more, and Savoir and Nuevos Horizontes have the most complete coverage. An apparent difference is that Venceremos does not involve parents in the classroom while the other PIPs do, but since this is not explicitly stated the reader is not sure if this is a real difference or simply a difference in the description.

Even within a single PIP, differences in level of detail exist for the activities discussed. Savoir provides a useful example of a parent survey, for example, but does not give very much information about how a program of parents volunteering in the classroom could be organized.

Some of the ideas presented are discussed in enough detail to be useful to a project director. It would be helpful if the PIPs distinguished between minimum requirements of a parent involvement component such as information meetings, and "extras" such as a toy-lending library.

Table C-25

Parent Involvement

	A	NH	S	V
Project staff member in charge of parent involvement; % in first year	50% of Instructional Consultant	Half-time Community Coordinator	Time Unspecified; English Curriculum Coordinator	Time & Person Unclear; probably the Project Director
Activities for parents:				
Parents visit classroom			X	
Special events			X	
Toy lending library	X			
Room at school for use by parents				X
Assisting in the classroom	X	Optional	X	
Library aides				X
Tutoring				X
Chaperoning field trips				X
Workshops, meetings	X	X	X	
Classes				
Communication with parents:				
Brochure		X		
Newsletter		X	X	X
Letters				X
Local media coverage	X	X		X
Parent teacher conferences			X	X
Teachers telephone parents or write	X			
Home visits by staff		X		
Survey of parents		X	X	

A = Adelante; NH = Nuevos Horizontes; S = Savoir; V = Venceremos

3.4.2 Community Input (Table C-26)

Discussion. The role and organization of the Parent Advisory Council (PAC) for each PIP is illustrated in Table C-26. As can be seen from the table, there is considerable variation in what is said about the PAC in the different PIPs.

Usefulness to adopters. Several plans for organizing parent advisory councils and holding meetings are represented among the PIPs. Because some plans are discussed in greater detail than others, some differences may be due to the PIP descriptions and not to the origination site practices. As with the parent involvement component, this section would be more useful if it clearly distinguished basic tasks of the PAC from desirable extras. The Venceremos PIP seems particularly incomplete in listing as the only task for its PAC the initiation of media coverage of the project. Current legislation mandates how PAC members are chosen for Title VII projects causing PIP recommendations to be obsolete.

3.4.3 Community Support

Discussion. All of the PIPs discuss the importance of developing community support and the role that this support can play in the continued life of the project. The principal means of developing support is through communication, which is discussed in the Section 3.5.3.

Usefulness to adopters. To be discussed in communications section.

3.4.4 Parent Education

Discussion. Parent education receives little more than a mention in most of the PIPs. Workshops are organized for parents, information meetings are held, and parents are invited to inservice (see Table C-25). The most complete coverage is provided by Savoir, where information needed by parents and reasons for negative attitudes are discussed in detail.

Table C-26

Parent Advisory Council (PAC)

	Adelante	Nuevos Horizontes	Savoir	Venceremos
How organized	District PAC	One PAC per school and district PAC	One PAC per school and district PAC	District PAC
Meetings	At least three time a year	School: monthly District: semi-monthly	Once a month	Every 6 weeks
Activities of PAC: Sponsors events for parents			X	
Assesses parent needs, attitudes			X	
Initiate media coverage				X
Participates in project needs assessment			X	
Consulted about changes for following year	X			
Organized into study teams		X		
Consulted about staff development	X	X		
How PAC members are chosen	Appointed by Project Director	Unclear	Appointed by Project Director	Unclear
Staff and non-parents who meet with PAC	Instructional Consultant, Project Director	Community Leader, Bilingual education teacher, principal	Project Director, Curriculum Coordinator, Representatives from PTA, business, education, clergy, one high school student	Representatives from local community agencies

Usefulness to adopters. The PIP treatment of parent education consists primarily of a reminder to include parents rather than information about how this should be done. The Savoir discussion of possible parent attitudes is helpful to an inexperienced project director.

3.4.5 Parent Conferences/Counseling

Discussion. Two of the PIPs mention parent teacher conferences and two require home visits. No specific information is given other than the requirement to maintain open channels of communication.

Usefulness to adopters. The PIPs contain little information on this subject.

3.4.5 Conclusions (Parents and Community)

Parent and community involvement is a major requirement of Title VII bilingual projects, and therefore, this topic deserves attention in the PIPs. The treatment of this topic is of uneven quality. In some PIPs detailed procedures are provided, but in others the topic is discussed too superficially to be helpful. Although different approaches to parent involvement are probably warranted in different situations, the differences among the PIPs do not seem related to other program goals. Therefore, it seems unlikely that a district that liked the Nuevos Horizontes staffing pattern would also want to provide exactly the same parent component described in Nuevos Horizontes. A summary of certain basic choices, and a list of desirable "extras" would be more helpful to inexperienced project directors than the present system.

3.5 Communication

3.5.1 Staff Relations (Table C-27)

Discussion. A chapter entitled "Staff Relationships" appears in all four PIPs with very minor changes. For illustration, a selection of the major points of this chapter appear in Table C-27. As can be seen from the table, most of the items describe general desired outcomes, rather than procedures for accomplishing them.

Usefulness to adopters. As a general statement of the kind of staff relations desired, the PIP chapter on this subject is useful. However, the chapter is not intended to serve as a guide to creating such relationships. Certainly, if there were serious problems in staff relationships, the advice in the PIPs would be of little use.

Table C-27

Selected Directives for Staff Relations
(For All PIPs Unless Otherwise Labeled)

Goals

Staff morale is high

No insoluble conflicts arise among project staff

Staff share in decision-making (Nuevos Horizontes only)

Cooperative relationships exist among all staff members

Authoritarian postures are discouraged (Savoir only)

Project Director and Instructional Staff

Director makes a point to ask for teachers' and aides' ideas

Project Director and Non-Instructional Staff

The staff whose roles overlap (PD and IC or PD and CC) should develop a good working relationship

The project director and the evaluator should agree on a well-defined plan and procedure for reporting negative findings if they should occur

Relationship Among Staff

Teachers supervise aides but this supervision should not be exercised in a manner that detracts from cooperation in the classroom

3.5.2 Relations with Non-Project Staff (Table C-28)

Discussion. Developing relations with non-project staff consists, principally, in communicating with all staff who can affect the project or who are affected by it. Each PIP has a chapter on public relations entitled "Communicating with School and Community," the content of which is summarized in Table C-28.

Usefulness to adopters. PIP explanations about communicating with non-project staff are concrete and therefore helpful to an inexperienced project director. The information provided collectively in the PIPs is comprehensive, but individual PIPs differ for apparently arbitrary reasons. For example, the PMDs of three of the PIPs give a list of instructions for involving the principals, but Adelante does not. Considering the important role of the principal in project schools, this is more likely to be an oversight than a project difference.

3.5.3 Dissemination of Project Information (Tables C-25 and C-28)

Discussion. The eventual success or failure of a project may depend less on intrinsic project qualities than on how the project is perceived by the school and by the community. The PIPs recognize this principle and stress the need to build and maintain support. The PIPs include orientation materials (posters, brochures, and a slide/tape presentation, available, unfortunately, in English only) to facilitate presentations about the project. Table C-25 summarizes the suggestions in the various PIPs for conveying project information to parents. Some of these techniques such as local media coverage or a project newsletter are not limited only to parents, but extend to the wider community as well. Table C-28 summarizes PIP directives for informing the various school audiences about the project.

Usefulness to adopters. Collectively the four PIPs provide a good source of suggestions for disseminating information. The orientation materials themselves were not popular with field test sites; perhaps

Table C-28

Communication with Non-project Staff

	A	NH	S	V
<u>District administrators</u>				
Orientation meeting	X		X	X
Involve district curriculum coordinator	X			X
Keep informed throughout project	X	X		X
<u>Principals</u>				
Orientation meeting	X		X	X
Understand reasons principals may be negative				X
Keep informed throughout project		X	X	X
Involve principals in decisions		X	X	X
Respect role difference of PD and principal			X	
Involve in project events			X	
<u>Non-project teachers</u>				
Orientation meeting	X			X
Project teachers share materials, equipment, and methods	X	X	X	X
Project director meets with school staff				X
Invite to staff development workshops		X	X	
<u>School Board</u>				
Orientation meeting	X		X	X
Show students in action	X	X	X	X
Provide costs and results	X	X	X	X
Keep board informed	X	X	X	

A = Adelante; NH = Nuevos Horizontes; S = Savoir; V = Venceremos

adopter sites would rather have posters and pictures of their own project than of the originating site.

3.5.4 Conclusions (Communication)

Communication and staff relations are given great importance in the PIP management system. They may be the invisible element that causes a successful project to run smoothly and, without which, a project will fail. To attempt to give instructions for successful staff relations is a very ambitious task and may be beyond the scope of any packaged program. General goals for staff interaction can only be goals: the rest depends on the individuals involved. In order to obtain improvements, management training or some sort of staff workshop may be needed.

The PIP discussion of communication is helpful to an inexperienced project director. However, the information provided by a compilation of the four PIPs would be more complete and useful than that provided by any individual PIP.

3.6 Evaluation

3.6.1 Strategies for Implementing Project Evaluation

Discussion (Table C-29). Each PIP has an evaluation manual which, except for introductory material specific to each PIP, is essentially the same. The PIP manuals do not call for a replication of the original site evaluation. Instead there is a discussion of various issues and choices evaluators face in planning and implementing an evaluation. Table C-29 is an outline of that discussion.

Usefulness to adopters. The problems faced by evaluators of bilingual education projects are numerous, and providing helpful information is a challenging task. Many of the directives contained in the evaluation manual are helpful, but the major problems are establishing a no-treatment expectation and finding adequate tests, especially in the non-English language. The PIP manuals do not recognize the difficulty of these two tasks, which in the field experience occupied a disproportionate amount of evaluators' time and frequently proved to be insurmountable problems. Much more detailed information, even for the less complex tasks, would be necessary for an inexperienced evaluator, but other publications exist for this purpose and the PIP does provide some references.

3.6.2 Conclusions (Evaluation)

Although the originating-site evaluation plans and results are provided, the PIPs do not encourage replication of these evaluations. The evaluation manuals alert the reader to general problems in bilingual education evaluation. However, the field experience showed that much more assistance is needed in this area.

Table C-29

Strategies for Planning and Accomplishing Project Evaluation

1. Assessing Project Impact

- comparison is essential in establishing a no-treatment expectation
 - use norm-referenced tests if appropriate
 - use local comparison group if available
 - comparison also possible with other bilingual program.
- student selection
 - same test cannot be used for selection and evaluation
 - evaluator should be involved in selection
 - method of selection has evaluation implications
 - at least two classes are necessary per grade level to counterbalance teacher differences.
- achievement testing
 - need to measure improvement in English, non-English language, and content areas
 - outcomes should be separated for students in different language dominance groups
 - standardized tests must be used in norm-referenced model, but criterion-referenced tests may be used in comparison group model
 - for beginning English students out-of-level testing is recommended
 - preferable to use same test for pre and posttesting
 - when using the same test in two languages, administer test first in less familiar language to minimize practice effect.
- short term and long term evaluation
 - some gains may take more than one year of operation to be visible
 - performance objectives may be used in short term evaluation, or in areas not readily measured by achievement tests.
- non-cognitive goals
 - may be major project goals
 - non-cognitive measures may be used as assessment instruments
 - non-cognitive measures may be used to sensitize teachers.

Table C-29 (Continued)

2. Monitoring and Improving Project Implementation

- outcome data must be considered in relation to level of implementation
 - rarely will all project classes implement all project features.
- conclusions on implementation/outcome data
 - project worked as planned
 - something worked, but it may not have been the project
 - project may not be replicable
 - project may not have been given a fair trial.
- assessing implementation
 - evaluator, project director develop checklist of key features using PIP.
- evaluator monitors non-classroom activities.
- evaluator suggests revisions to improve project implementation.

3. Unanticipated Consequences

- methods for finding unanticipated consequences may be largely impressionistic but all data, interviews, evaluation should be examined with this question in mind.
- if some consequences are negative they should be noted, not necessarily corrected.
- consequences of a personal level (i.e., staff interaction) are also important.

General Conclusion

Each of the four PIPs consists of five or six manuals as well as other informational and instructional materials. This summary therefore encompasses more than 2,000 pages of information. The bilingual PIPs exhibit some desirable features and it is hoped that the discussion of these features will be helpful in future development efforts.

The PIPs provide staffing configurations and extensive role descriptions, two major areas of program design. This alone is helpful in organizing a new project, and if a qualified staff is selected, may play a major role in successful implementation. The role of project director is supplemented by a calendar and a summary of tasks. In the field test, this was useful to both experienced and inexperienced directors as a checklist, even if it was not followed exactly. The discussion of communication with school and community, if it were compiled across PIPs, would also be useful to some new project directors. The general guidelines on bilingual education and on the components of a bilingual project could also serve in program planning if their limitations were clearly understood.

However, a summary and comparison of the contents of the four PIPs leads to the conclusion that there are major flaws with the present design of the bilingual PIPs.

First, the existence of four different PIPs leads automatically to a comparison. The four projects are generally similar in staffing, approach, organization, and instructional content, and therefore do not offer four real choices. Some differences exist that could be significant, such as language proficiency of the target population. However, these differences are superficial and are not incorporated systematically into the goals, approaches, and organizations of the total projects. Many minor differences, such as number of classrooms, the role of the parents, function of teacher aide, do not reflect a major difference in goals or approach. In relation to the program as a whole they seem arbitrary,

although they probably reflect differences among the originating sites, and the documentation of the programs. In many instances (e.g., role of parents), a compilation of the information contained in the four PIPs would be more useful and more complete than what is contained in any single PIP.

Second, the purpose of the PIPs was to help LEAs implement bilingual programs with a minimum of technical assistance by replicating exemplary projects. But the PIPs describe general approaches to multi-faceted, whole-day programs rather than specific procedures and materials, thereby making replication, in the usual sense of the word, impossible. Even by following PIP directives faithfully, it would be unlikely for students in an adopter site to receive the same instructional treatment as students in the originating site. If replication of instructional treatment is a goal, much more specific information is needed about bilingual-education classroom procedures, techniques, use of materials, and classroom organization.

Third, because the PIP does not provide an instructional system for use by classroom teachers, the question arises as to who the intended audience is. As they exist, the bilingual PIPs consist primarily of management guidelines intended for project directors. Because of the nature of the projects, the packages are primarily intended for highly qualified, experienced staff who are already knowledgeable about bilingual education. However, an LEA possessed of such a staff is less likely to need a PIP than a district with a less experienced and less knowledgeable staff. Many areas of the PIPs could benefit from a clearer definition of the audience and a more limited and more focused goal for their use.

Fourth, the current PIPs address areas in which a package is not likely to be useful. For example, materials and their prices quickly become obsolete. Hiring practices and organizational structures at LEAs are not easily changed. Student selection, classroom composition, and evaluation requirements are subject to other laws and regulations. Credibility of the whole package may be lost when directives become dated or conflict with other requirements.

Finally, the PIPs are intended to promote whole-project adoption, rather than the selection among various components. In a relatively simple pull-out-type program, perhaps this concept makes sense, but in an area as complex as bilingual education, which encompasses a whole-day program for several grade levels, this concept is impractical. It is extremely doubtful that an LEA which chose Venceremos because of the culture and heritage component would also wish to have its Parent Advisory Committee meet exactly the same number of times and perform exactly the same tasks as the Venceremos project, for example. This is especially true because the function described in the PIP reflects what occurred at the originating site and these practices are not necessarily optimal in another district.

Future packaging efforts should consider these issues before designing further bilingual education materials.

APPENDIX D

PRE- AND POSTTEST SCORES FROM FIELD TEST SITES

Pre- and Posttest Scores From Field-Test Sites

Second-Year Data

The conclusion of Substudy II, the evaluation of project impacts, was that the imprecision of the measurements and the many confounding variates precluded any determination of project impacts on student achievement (Sections 10 and 11). However, in the process of arriving at that decision, RMC completed an extensive survey (with some reanalyses) of the data from the field-test sites, and reviewers of preliminary drafts of this report requested that achievement test information be included for the use of the interested reader. This appendix comprises that information.

Several things should be kept in mind by the reader:

- Raw-score gains (or losses) mean very little. In all possible cases, RMC converted the scores provided by the field-test sites to raw scores and to NCEs. Raw scores are provided for the reader who may wish to look up other scales in the test publishers' norm tables. NCEs provide a comparison to the gains made by other students in the country at comparable achievement levels. However:
- NCE "gains" (or losses) do not indicate program success (or failure). It is possible that even a substantial gain represents poorer performance than the students would have achieved in that district without the program. Similarly, even a substantial loss may represent a great improvement in other districts. Further, there is a great deal of measurement error in these values, and the values may be systematically distorted by extraneous factors.
- The "site codes" in the tables do not correspond to the order of the sites in Appendix A. In order to preserve the anonymity of the sites, these codes were assigned randomly.

 *
 * CAUTION *
 *
 * We caution the reader that any attempt to use these scores to support *
 * arguments either for or against the effectiveness of (a) bilingual educa- *
 * tion in general, or (b) the bilingual programs in the 19 field-test sites *
 * would be professionally irresponsible. *
 *

Contents

1. General notes
2. Information from each site on:
 - Assessment of language proficiency
 - Assignment to treatment
3. Test name key
4. Footnotes
5. Data tables

General Notes Applying to Performance-Level Data Tables

- a. Information on assignment to treatment and language proficiency groups is provided to accompany these tables.
- b. These data were collected during the 1978-79 school year except where otherwise indicated.
- c. Means are converted to NCEs wherever possible to provide a normative method of cross-site comparison. The NCE metric has a mean of 50 and a standard deviation of 21.06.
- e. Raw score gains are not computed where different test levels were used pre and post.
- f. p=ns. T test is not significant at the .05 level.

Information Sheet to Accompany
Second-Year Performance-Level Data Tables

Site	Assessment of Language Proficiency	Assignment to Treatment
1	Language dominance classifications were assigned by the staff at the project. Four criteria were used: (1) home visits and surveys, (2) LAS scores, (3) performance on achievement tests, (4) classroom observation. Students were divided into three groups for analysis: LESA-stronger in English, LESA-stronger in Spanish, and Non-LESA. Regarding LAS scores: LESA-stronger in English is defined as <3 on English + Spanish LAS with English "stronger." LESA-Spanish stronger is defined as English LAS score <3, Spanish may be at any level.	Non-LESA students were divided into two groups for instruction: bilinguals and monolinguals. All LESA students were served.
2	—	—
3	Based on home language survey, 84% of parents speak to their children exclusively in Spanish. No language testing was done in the second year. 65% of families have been in this country five years or less.	Students enrolled in the state program were transferred to the Title VII program at certain grade levels. Some students did not get into Title VII because of administrative restrictions.
4	"All students in grades K-12 participated in a home language survey, screening/diagnosis procedures, and testing to determine their primary language....The LAS was used in the fall prior to November and data organized for systematic identification of Limited English Proficiency students at all grade levels." [Site's Final Report]	In general, LESA students were assigned to Title VII classrooms.

Site	Assessment of Language Proficiency	Assignment to Treatment
5	The PAL (OLDM) was administered to assess oral language dominance.	The site identified schools with a high percentage of minority children and/or schools willing to participate. Within schools, teachers were selected according to bilingual skills and experience. In some cases LESA students within a district were all bussed to one school.
6	All students were considered LESA on entry to the program. For most students (K, 1, and 2) entry was at the kindergarten level. "Since they have not exited from the program they are still being treated as LESA students: receiving instruction in ESL, and bilingual instruction in reading and math." [letter from evaluator] LESA classification was validated during the school year with LAS testing and information from a home language survey.	"Assignment to Title VII was based on educational need with teacher recommendations given primary weight....With very few exceptions participating students in first and second grade were 'veterans' of the previous year of the project.... Parental approval is a necessary prerequisite." [Site's Final Report] State law requires students who enter the State bilingual program to remain until 3rd grade. Also assigned to the project were some Anglo volunteers and some non-LESA low achievers.
7	Home language survey indicates that 83% of parents have English as a native language. 28% use both English and French at home.	Those teachers who felt comfortable introducing a bilingual component into their classrooms did so.

Site	Assessment of Language Proficiency	Assignment to Treatment
7		Other classrooms became the control classrooms. Parental permission was required for student participation. The majority of the students in the class must be of Franco descent, preferably a 75/25 ratio.
8	"Students are divided into Francos and Anglos for analytic purposes. The classification was originally made by persons in the school knowledgeable of a student's ethnic background. Later in the year another check was made and a composite score was defined to determine degree of limited English Proficiency." [letter from evaluator] No information is available on the nature of the composite. Its use resulted in "some" students being reclassified. The report gives no indication of analysis grouping being made on the basis of LEP status--only on ethnic status.	Although students were identified according to number of years in the program this information was not used for analysis.
9	"Pupils were assigned a language classification of LES, NES, FES on the basis of their scores on the BSM." [from data sheets]	"The basic device used for the identification and placement of pupils in the program (and in the categories of NES, LES, and FES) was the Bilingual Syntax Measure given in Spanish and English as appropriate." [Site's Final Report] Other criteria used for identification and placement include: the State Home Language Survey, standardized test data in reading and math, teacher ratings of listening skills, and teacher rating of writing skills.

Site	Assessment of Language Proficiency	Assignment to Treatment
10	The report implies that selection of treatment students and identification of LEP students were one and the same process.	"Factors used to select LEP children to participate in the Title VII prprogram: (1) home language survey provided by State department of education, (2) teacher rating of English language proficiency, (3) the SRA achievement test: >6 stanine is non LEP." [Site's Final Report] "Within each school, classes were randomly selected to be in the tratment and control groups." [Site's Final Report] RMC on-site observation leads us to question the veracity of this statement. Also, it is difficult to reconcile these two pieces of information from the report. Data in the report are presented by Treatment and Control group with the implicit suggestion that all Treatment students are LEP, as defined by the state.
11	The project director designed a thorough set of criteria to establish language dominance. Several factors were involved: Scores on the PAL (OLDM), information on literacy, level of attainment in classroom reading curriculum, and CTBS achievement test scores. The determination of language dominance was made at the end of the year. This information, along with a substantial amount of other biographic/demographic information could not be used for data analysis because of small Ns.	All classes K-2 were considered candidates for the Title VII program at the site.
12	To identify LESA students the site used "primarily" the state adopted home language survey form. "If the parents said that French is spoken in the home, then we considered him a candidate depending	"Already existing classes whose teachers are bilingual were selected for participation in the program. They are composed of both French

Site	Assessment of Language Proficiency	Assignment to Treatment
12	(continued) on his SRA scores." [letter from evaluator] If no home language survey was available on a particular student, "teacher observation" was substituted. "If a student scored 76% or higher on the reading part of the SRA, he is not considered LESA even if he has a strong French background." [letter from evaluator]	dominant and English dominant children. Because of lack of time between actual funding and implementation, teachers were unable to screen students for dominance. Once classes were established, participants were relatively balanced according to language dominance." [Site's Final Report]
13	Students were classified as LESA on the basis of teacher judgment. Pretest data from several measures in both Spanish and English were provided to teachers as additional information for classification.	—
14	Students were classified in language dominance groups according to English LAS test scores. FES = 85-100, Near fluent = 76-84, LES = 66-78, NES = 0-65. [Site's Final Report]	For first grade a local control group of 17 students was compiled from Mexican-American children with no previous bilingual education experience, located throughout the district. These students were tested in the fall of second grade prior to receiving the Title VII program. [Site's Final Report]
15	The LAB test was used to determine language proficiency and assign students to categories. It is implied that the site used the scoring system developed by the publisher, however the evaluator felt this system overidentifies LEP students [Site's Final Report]	"Pupils are selected to participate in the Title VII program in the same way pupils are selected for other bilingual programs in [Site 15]. Policy for selection procedure is in conformance with state law. Parental permission is also required." [Site's Final Report]

Site	Assessment of Language Proficiency	Assignment to Treatment
16	A student is classified LEP by: LAS English score ≤ 3 , Spanish LAS score ≥ 1 , achievement test score in reading $\leq 30\%$, classroom reading level is one year or more below grade level.	Title VII entry criteria: "Those most in need of bilingual education," which includes (a) those with higher language fluency in Spanish than English, (b) Spanish surname students with low language fluency in English and Spanish (LAS level of 1 or 2 in both), (c) Spanish surname students with equivalent fluency in both languages.
17	No quantitative assessment of English dominance was reported for this monolingual, Spanish-speaking population.	Control classrooms were randomly selected by schools. No school had both treatment and control classrooms. Program and control classrooms were considered similar on the following four socio-demographic characteristics: (a) population growth, (b) population density, (c) family income, (d) percentage of students migrating to U.S. Both treatment and control classrooms were selected because of the high proportion of students enrolled who were likely to migrate to the U.S.
18	—	—
19	Data are analyzed by language proficiency group although the report does not indicate how students were assigned to categories. It is likely that such assignment was made using scores from the Bilingual Syntax Measure, which the site administered.	No information on assignment to treatment.

Test Name Key

Nationally Standardized Tests

- CAT: California Achievement Test
- CTBS: Comprehensive Test of Basic Skills. CTBS Español was published in 1973. It is a direct translation of CTBS/S published in 1974. CTBS total reading raw scores are not comparable across languages. There is one more subtest in English than Spanish. NCEs can be compared.
- InterAmerican: Test of Reading/Prueba de Lectura (PL)
Test of General Ability/Prueba de Habilidad General (PHG)
(contains less than 25% math items)
- MAT: Metropolitan Achievement Test
- SRA: SRA Achievement Series

Locally Developed Tests

- ARS: Affective Reporting System. Published by Teaching Research Publications, Monmouth, Oregon. This measure requires a child to circle a happy, sad, or neutral face in response to locally written items. Therefore, ARS scores are not comparable across sites.
- French Ach. Test: French Achievement Test. Locally developed criterion referenced measure used at several sites. Composition of subtests and number of items varies across sites.
- French Lang. Acqu. Test: French Language Acquisition Test. Consists of 51 listening and oral production items.
- LAB: Language Assessment Battery. Level I contains 40 items.
- LAS: Language Assessment Scale. The LAS Level I consists of 98 items and a story-telling exercise.
- Mathematics Skills Test (Test of Basic Math Skills). This Spanish language test consists of 25 items, and was developed by the user site with the assistance of Educational Testing Service.
- Reading Skills Test (Test of Spanish Skills). This Spanish language test consists of 40 items and was developed by the user site with the assistance of Educational Testing Service.
- PAL: Primary Acquisition of Language Test (Also called the Oral Language Dominance Measure (OLDM). Consists of 28 oral production responses, each of which may consist of several words.
- PSCI: Primary Self-Concept Inventory. Contains 20 items completed by the student.

Footnotes

1. Ns used to calculate pre- and posttest means were not restricted to matched cases. Sufficient information for accurate matching not available from site.
2. Posttest means were correctly adjusted using analysis of covariance techniques. Significance levels are indicated.
3. Site used inappropriate statistical procedures. RMC performed a norm-referenced analysis.
4. 12-month testing interval.
5. Means obtained from site report checked against raw data obtained from site.
6. A random sample of students was posttested to minimize the testing burden. No documentation of sample selection procedures is available.
7. No pretest data available.
8. A statistically appropriate t-test was performed between groups. Significance levels are reported.
9.
 - a. Means are not available, although data were collected at the site.
 - b. Statistical analysis was completed at site and results reported although data are not available.
10. Category scores, not raw scores, are reported by the site for oral language testing.
11. Raw scores not available; numbers reported on raw score tables are expanded standard scores (scale scores).
12. Mastery level or growth expectation not established.
13. Spanish and English Total Math data combined at site. Most testing is in English. English norms are used for NCE conversions.
14. Math computation subtest only.
15. The report itself gives slightly different Ns when reporting raw scores on one page and percentiles on another.
16. Site used inappropriate statistical procedures. Data available were not sufficient for RMC to perform a reanalysis.

17. The aggregate raw score standard deviation is not available. A range of standard deviations over five schools is provided.
18. Students were tested using an on-site translation of the English language directions and test items of this test.
19. Posttest administered in the fall. Conversion to NCEs is based on expanded standard scores used for out-of-level testing.
20. No data were collected.
21. Conversion to NCEs not possible.
22. Invalid data.
23. Reading score is vocabulary subtest only.

1st Grade, English Reading

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Gain
					Mean	S.D.	Mean	S.D.				
3	1	LESA, English Instruction	48	CTBS, B(S), 1974	26.3	8.8	59.7	13.4	33.4	38	51	13
3	1	Non-LESA English Instruction	73	CTBS, B(S), 1974	38.3	15.6	69.6	12.6	31.3	61	57	- 4
	1	76-77 English Dom. LESA	54	CTBS B(S), 1974			56.4				48	
	1	78-79 English Dom. LESA	61	CTBS B(S), 1974			54.8				47	
	1	76-77 Non-LESA	68	CTBS B(S), 1974			64.1				53	
	1	77-78 Non-LESA	75	CTBS B(S), 1974			66.2				54	
9a	2	Title VII Remedial										
	3	Title VII 1st grade	9	CTBS B(S), 1974	25.4	6.1	25.0	10.5	- .4	37	13	-24
	3	Regular Title VII 1st grade	16	CTBS B(S), 1974	32.1	5.6	62.1	11.7	30	52	52	0
9a	4	Title VII		InterAmerican Test of Reading, 1966								
1,3,5	5	All Title VII	Pre=175 Post=169	CTBS, B(S), 1974	20.6	8.3	34.3	13.8	13.7	24	26	2
4,7	6	All Title VII	46	CAT, 1, 1970			85.2	12.0			59	

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1st Grade, English Reading (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Gain
					Mean	S.D.	Mean	S.D.				
7,8,11	7	Non-Title VII Controls	177	SRA, B (1), 1978			143	47			40	
7,11	7	All Title VII	176	SRA, B (1), 1978			138	51	p=ns		38	
5,17	8	Title VII Francos	54	Pre=Metro, Primer(H), 1971 Post=Metro, Primaryl(F), 1971	28.5	1.6 to 5.5	38.3	5.7 to 10.7		38	46	8
5,17	8	Title VII Anglos	38	Pre MAT, Primer(H), 1971 Post=MAT, Primaryl(F), 1971	30.4	2.1 to 8.1	41.3	3.1 to 9.3			53	
5	9	Title VII NES	18	CTBS,B(S), 1974			29.0	12.9			19	
5	9	Title VII LES	25	CTBS,B(S), 1974	22.0	6.2	33.0	10.4	11	30	25	-5
5	9	Title VII FES	9	CTBS,B(S), 1974	31.0	12.6	58.0	19.4	27	49	49	0
5,11	10	Title VII	173	SRA,B(1) 1978	87.9	35.2	179.9	66.0	92	38	49	11
5,8,11	10	Non-Title VII	125	SRA,B(1) 1978	80.8	33.8	174.9	56.4	p=ns 94.1	36	45	9
9a(Pre)	11	All Title VII	95	Pre=CTBS A(S),1974 Post=CTBS, B(S),1974			54.2	19.1			47	

1st Grade, English Reading (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Gain
					Mean	S.D.	Mean	S.D.				
4,11	12	All Title VII	100	SRA,B(1), 1978	70.4	28.6	115.7	55.2	45.3	41	32	9
9a	13	Title VII										
	13	Non-Title VII										
8	14	Title VII NES/LES	34	CTBS,B(S), 1974	31.0		64.2		33.2	43	51	8
		Local Untreated Comparison Group							p<.01			
19	14	Title VII FES	17	CTBS,B(S), 1974			48.2	16.0			28	
	14	Title VII FES	39	CTBS,B(S), 1974	27.8		74.4		46.6	42	62	20
20	15											
1,2,4	16	Title VII LES/NES	pre=46 post=55	pre=CAT,10 (C), 1977 post=CAT,11 (C), 1977	86.5	17.2	30.5	10.7		36	40	4
4,7	16	State Bilingual LES/FES	pre=38 post=49	pre=CAT,10 (C), 1977 post=CAT,11 (C), 1977	79.0	20.0	33.7	7.5		31	45	14
4,7	16	All Title VII 77-78	70	CAT,2 (C), 1970			25.7	9.5			32	
2,4	16	Non-Title VII FES in 77-78 Title VII Classroom	78	CAT,2 (C), 1970			38.9	12.5			53	

1st Grade, English Reading (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest	Posttest	Gain
					Mean	S.D.	Mean	S.D.		Mean	Mean	
20	17											
9a	18	Title VII										
	19	Title VII FES	23	CTBS,B(S), 1974	27.8	6.0	54.5	18.6	26.7	43	47	4

1st Grade, Spanish/French Reading

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				NCEs			
					Pretest		Posttest		Gain	Pretest		Posttest
					Mean	S.D.	Mean	S.D.		Mean	Mean	Gain
	1	Title VII LESA	?	CTBS, B (Esp.), 1977	18.7		38.4		19.7	47	50	3
9a	2											
	3	Remedial Title VII	9	CTBS, B (Esp.), 1977	19.4	3.0	18.1	7.3	-1.3	48	19	-29
	3	Regular Title VII	18	CTBS, B (Esp.), 1977	26.6	8.5	54.9	7.2	28.3	65	59	-6
9a	4											
1,3,5	5	All Title VII	pre=169 post=183	CTBS, B (Esp.) 1977	15.2	8.4	33.9	15.2	18.7	35	46	11
21	6	All Title VII	46	InterAmerican PL, 1962	18.3	15.3	50.3	15.4	32			
20	7											
20	8											
5	9	Title VII NES	11	CTBS, B (Esp.), 1977	19.0	15.2	31.0	17.7	12	47	42	-5
5	9	Title VII LES	40	CTBS, B (Esp.), 1977	15.0	4.1	27.0	12.1	12	34	34	0
12,21	10	All Title VII	?	French Ach. Test	2.2	1.7	4.0	2.4	1.8			
9a	11											
21,23	12	All Title VII	?	French Ach. Test	5.3	3.2	8.5	4.1	3.2			
9a	13	Title VII										
9a	13	Non- Title VII										
	14	Title VII NES/LES	32	CTBS, B (Esp.), 1977	21.3		38.8		17.5	27	32	5
20	15											

1st Grade, Spanish/French Reading (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest	Posttest	Gain
					Mean	S.D.	Mean	S.D.		Mean	Mean	
1	16	Title VII LES/NES	pre=62 post=65	CTBS,B (Esp.) 1977	15.3	8.3	28.7	12.0	13.4	34	40	6
16,21	17	All Title VII	130	Spanish Reading Test	10.6	6.6	24.4	7.1	13.8			
16,21	17	Non- Title VII		Spanish Reading								
20	18	Controls	89	Test	13.4	6.9	28.2	8.5	14.8			
20	19											

1st Grade, Math in English

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				NCEs				
					Pretest		Posttest		Gain	Pretest		Posttest	
					Mean	S.D.	Mean	S.D.		Mean	Mean	Gain	
	1	LESA, English Instruction	48	CTBS, B(S), 1974	18.3	6.3	32.3	8.7	14	41	51	10	
		Non-LESA English Instruction							p=ns				
	1	77-78 English Dom. LESA	73	CTBS, B(S), 1974	26.0	9.1	40.7	9.6	14.7	62	62	0	
	1	Current English Dom. LESA	54	CTBS B(S), 1974			29.5				45		
	1	76-77 Non-LESA	61	CTBS B(S), 1974			34.1				53		
	1	77-78 Non-LESA	68	CTBS B(S), 1974			35.0				54		
	1	77-78 Non-LESA	75	CTBS B(S), 1974			39.9				61		
9a	2												
	3	Remedial Title VII 1st grade	9	CTBS B(S), 1974	17.8	3.3	20.6	4.2	2.8	32	14	-18	
	3	Regular Title VII 1st grade	16	CTBS B(S), 1974	28.2	9.7	44.6	12.4	16.4	80	78	- 2	
				InterAmerican: Test of General Ability,									
21	4	All Title VII	21	1962	55.3	12.0	59.6	9.3	4.3				
1,3,5	5	All Title VII	Pre=173 Post=169	CTBS, B(S), 1974	14.4	7.7	27.8	11.1	13.4	29	43	14	

1st Grade, Math in English (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Gain
					Mean	S.D.	Mean	S.D.				
4	6	All Title VII	46	CAT, 1, 1970			59.5	14.8			34	
7,8,11	7	Non-Title VII Controls	177	SRA,B(1), 1978			151	48			44	
7,11	7	All Title VII	176	SRA,B(1), 1978			151	34	p=ns 0		44	
5,17	8	Title VII Francos	55	Pre=MAT, Primer(H), 1971 Post=MAT Primaryl(F), 1971	28.8	2.8 to 11.3	40.8	4.0 to 12.4		34	46	16
5,17	8	Title VII Anglos	38	Pre=MAT, Primer(H), 1971 Post=MAT Primaryl(F), 1971	32.4	2.8 to 10.8	43.7	4.3 to 9.9			52	
5	9	Title VII NES	22	CTBS,B(S), 1974			23	13.3			33	
5	9	Title VII LES	36	CTBS,B(S), 1974	13.0	5.5	24.0	10.4	11	25	41	16
5	9	Title VII FES	8	CTBS,B(S), 1974	16.0	6.3	28.0	13.9	12	35	44	9
5,11	10	All Title VII	173	SRA,B(1), 1978	106.3	16.2	160.0	36.9	53.7	36	57	21
5,8,11	10	Non-Title VII	125	SRA,B(1), 1978	106.3	22.8	154.3	33.2	p=ns 48.0	34	53	19
	11	All Title VII	95	Pre=CTBS A(S), 1974 Post=CTBS, B(S), 1974			35.8				56	

1st Grade, Math in English (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Gain
					Mean	S.D.	Mean	S.D.				
4,12	12	All Title VII	100	SRA,B(1), 1978	95.9	21.3	131.0	25.7	35.1	37	36	- 1
9a	13	Title VII										
9a	13	Non-Title VII										
13,14	14	Title VII NES/IES	32	CTBS,B, (S & Esp.), 1974 & 1977	21.0		37.0	12.1	16	49	58	9
15,19	14	Local Untreated Comparison Group	17	CTBS,B,(S), 1974			19.2	8.8			24	
15	14	Title VII FES	40	CTBS,B,(S), 1974	18.8		47.2		28.4	43	69	26
20	15											
1,2,4	16	Title VII LES/NES	pre=46 post=55	pre=CAT,10 (C), 1977 post=CAT,11 (C), 1977	15.5	30.0	36.6	9.5		41	45	4
1,2,4	16	State Bilingual LES/FES	pre=39 post=48	pre=CAT,10, (C), 1977 post=CAT,11 (C), 1977	13.7	4.0	36.7	8.8		34	45	11
20	17											
9a	18											
	19	Title VII FES	23	CTBS,B,(S) 1974	16.3		41.7			35	63	28

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1st Grade, Math in Spanish/French

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Gain
					Mean	S.D.	Mean	S.D.				
	1	LESA	?	CTBS, B (Esp.), 1977	16.8		29.7		12.9	38	48	10
20	2											
	3	Remedial Title VII	9	CTBS, B (Esp.), 1977	16.9	3.8	18.9	3.7	2	37	22	-15
	3	Regular Title VII	18	CTBS, B (Esp.), 1977	27.7	8.6	43.2	9.1	15.5	69	67	- 2
3,21	4	All Title VII	pre=21 post=?	InterAmerican: PHG, 1962	48.2	5.6	60.9	10.9	12.7			
1,3,5	5	All Title VII	pre=169 post=183	CTBS, B (Esp.), 1977	14.4	6.4	27.0	11.3	12.6	31	45	14
21	6	All Title VII	46	InterAmerican: PHG, 1962	37.6	7.7	65.8	5.6	28.2			
20	7											
20	8											
	9	NES	14	CTBS, B (Esp.), 1977	9.0	7.8	21.0	14.0	12	10	26	16
	9	LES	34	CTBS, B (Esp.), 1977	16.0	3.8	27.0	11.3	11	35	44	9
	10	All Title VII	?	French Ach. Test	11.3	6.2	17.5	7.8	6.2			
20	11											
21	12	All Title VII	?	French Ach. Test	8.4	4.7	17.6	9.2	.8			
9a	13	Title VII										
13, See Eng. Math	14											
18	15	All Title VII	100	MAT, Primer 1978			33.9	8.6			53	
	15	Non-Title VII Controls	20	MAT, Primer 1978			32.4	7.1			45	

1st Grade, Math in Spanish/French (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest	Posttest	Gain
					Mean	S.D.	Mean	S.D.		Mean	Mean	
5	16	Title VII NES/LES	pre=62 post=65	CTBS, B (Esp.), 1977	16.1	8.9	32.5	12.8	16.4	35	52	17
21	17	All Title VII	132	Mathematics Skills Test	9.8	5.9	19.0	4.0	9.2			
21	17	Non- Title VII		Mathematics								
20	18	Controls	122	Skills Test	12.6	5.5	17.5	5.1	4.9			
20	19											

1st Grade, English Oral Language

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest	Posttest	Gain
					Mean	S.D.	Mean	S.D.				
2,21	1	LESA Spanish Instr.	22	English LAS,I,1977	55.3	18.4	65.7	20.6	10.4			
2,21	1	LESA English Instr.	17	English LAS,I,1977	71.4	15.8	73.2	20.2	1.8			
2,21	1	Non-LESA	32	English LAS,I,1977	93.3	6.5	86.8	11.3	-6.5			
20	2											
20	3											
3,21	4	Title VII	pre=12 post=?	English LAS,I,1977	54.8	16.0	84.9	15.2	30.1			
10,21	5	All Title VII	pre=158 post=168	English PAL	1.5	1.0	2.6	1.2	1.1			
21	6	All Title VII		English LAS,I,1977	71.8	14.6	83.1	8.6	11.3			
20	7											
20	8											
9a	9											
20	10											
9a	11											
20	12											
9a	13											
21	14	NES/LES	35	English LAS,I,1977	64.2		75.1		10.9			
	15	All Title VII	75	English LAB,I,1976	19.8	7.8						
	15	Non-Title VII Controls	25	English LAB,I,1976	20.4	5.6						
2,6,21	16	Title VII LES/NES	pre=68 post=14	English LAS,I,1977	62.6	14.8	85.9	20.0	23.3			

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1st Grade, English Oral Language (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				NCEs			
					Pretest		Posttest		Gain	Pretest Posttest		
					Mean	S.D.	Mean	S.D.		Mean	Mean	Gain
		State Bilingual	pre=61	English					23.0			
2,6,21	16	LES/FES	post=16	LAS,I,1977	65.9	15.3	88.9	12.9	ns (pre/post)			
20	17											
20	18											
9a	19											

1st Grade, Spanish/French Oral Language

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Gain
					Mean	S.D.	Mean	S.D.				
	1	LESA Spanish Instr.	22	LAS,1,1977	70.8	18.3	63.0	20.4	-7.8			
	1	LESA English Instr.	17	LAS,1,1977	35.3	24.9	40.9	22.4	5.6			
	1	Non-LESA English Instr.	32	LAS,1,1977	23.8	26.9	33.0	22.9	9.2			
20	2											
20	3											
10,21	4	All Title VII	14	LAS,1,1977	2.0	1.3	3.1	1.4	1.1			
10,21	5	All Title VII	pre=158 pcst=168	PAL (OLDM),1975	3.4	1.2	4.3	1.0	.9			
21	6	All Title VII	46	LAS,1,1977	61.0	14.8						
20	7											
5,21	8	Title VII Francos	64	French Lang. Acqu. Test, Level II	16.8		27.8		11			
5,21	8	Title VII Anglos	35	French Lang. Acqu. Test, Level II	17.5		27.8		10.3			
9a	9	Title VII										
20	10											
9a	11	Title VII										
20	12											
9a	13	Title VII										
21	14	Title VII FES	37	Spanish LAS,1,1977			13.5					

1st Grade, Spanish/French Oral Language (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest	Posttest	Gain
					Mean	S.D.	Mean	S.D.				
21	14	Title VII NES/LES	35	Spanish LAS,1,1977			74.6					
20	15											
9a	16	All Title VII										
9a	16	State Bilingual LES/FES										
20	17											
20	18											
9a	19											

1st Grade, Affective Testing

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Posttest Gain
					Mean	S.D.	Mean	S.D.				
12,21	1	Title VII All LESA	38	PSCI, 1974	13.0	2.5	13.5	2.5	.5			
12,21	1	Title VII non-LESA Eng. Instr.	29	PSCI, 1974	14.1	1.9	14.3	2.3	.2			
12,21	1	Title VII LESA 76-77	14	PSCI, 1974	11.1	2.9	11.6	2.5	.5			
12,21	1	Title VII LESA 77-78	14	PSCI, 1974	12.0	2.9	13.6	2.2	1.6			
12,21	1	Non-LESA 76-77	10	PSCI, 1974	13.2	2.3	13.2	2.2	0.0			
12,21	1	Non-LESA 77-78	10	PSCI, 1974	14.3	1.8	14.5	1.3	.2			
20	2											
20	3											
9a	4	All Title VII		PSCI, 1974								
1,12,21	5	Current (78-79) Title VII	pre=169 post=181	PSCI, 1974	12.3		13.3					
12,21	5	Same Group Grade K 77-78	112	PSCI, 1974	11.4							
12,21	6	All Title VII	46	PSCI, 1974	13.3	3.0	14.5	2.1				
20	7											
20	8											

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1st Grade, Affective Testing (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest	Posttest	
					Mean	S.D.	Mean	S.D.		Mean	Mean	Gain
9a	9	Title VII										
20	10											
20	11											
20	12											
20	13											
20	14											
9a	15	Title VII										
									pre -			
			pre=62		pre	mid	post		post			
		Title VII	mid=66		X =	X =	X =		=			
1,12,21	16	LES/NES	post=59	ARS	41.7	42.8	51.2		9.5			
		Title VII										
		Classroom										
		English				mid	post		mid -			
		Mono-	mid=63		X =	X =	X =		post			
1,12,21	16	linguals	post=68	ARS		46.1	49.4		=			
20	17								3.3			
20	18											
20	19											

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2nd Grade, English Reading

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Gain
					Mean	S.D.	Mean	S.D.				
20	1											
9a	2	Title VII										
	3	All Title VII	17	CTBS,C(S), 1974	21.0	4.5	34.2	13.8	13.2	22	35	12
				InterAmerican Test of Reading, 1966								
3,21	4	All Title VII	27	CTBS,C(S), 1974	47.1	19.0	61.0	17.1	13.9			
1,3,5	5	All Title VII	pre=144 post=140	CTBS,C(S), 1974	19.6	8.8	26.9	14.6	7.3	18.9	26.3	7
4,7	6	All Title VII	54	CAT,1,1970	79.1	10.7	100.0	12.4	20.9	57	51	- 6
		Non-Title VII										
7,8,11	7	Controls	178	SRA,B(1), 1978			214	55			44	
				SRA,B(1), 1978								
7,11	7	Title VII	161				213	54	p=ns		44	
						3.7 to 9.3		8.1 to 11.5				
5,17	8	Title VII Francos	63	MAT,Primary II, 1971	47.0		56.1		9.1	55	59	4
						4.1 to 11.9		6.2 to 12.6				
5,17	8	Title VII Anglos	31	MAT,Primary II, 1971	45.3		54.3		9	49	53	4
5	9	Title VII NES	18	CTBS,C(S), 1974			26	8.4			33	
5	9	Title VII LES	34	CTBS,C(S), 1974	22	9.8	29	15.6	7	24	28	4
5	9	Title VII FES	20	CTBS,C(S), 1974	26	15.1	49	15.6	23	32	44	12
22	10	Title VII										
		Non-Title VII										
22	10	Title VII										

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2nd Grade, English Reading (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Posttest Gain
					Mean	S.D.	Mean	S.D.				
				pre=CTBS,A (S), 1974 post=CTBS,B (S), 1974 SRA,B(1) 1978								
	11	All Title VII	26		25.5		42.2			30.7	40.7	10
4,11	12	All Title VII	80		123.1	46.4	188.3	55.0		34	34	0
9a	13	Title VII										
9a	13	Non-Title VII										
	14	Title VII NES/LES	27	CTBS,C(S), 1974	31.0		51.7		20.7	40	45	5
	14	Title VII FES	36	CTBS,C(S), 1974	42.8		63.2		20.4	51	53	2
20	15											
1,2,4	16	Title VII LES/NES	pre=54 post=55	pre=CAT,11 (C), 1977 post=CAT,12 (C), 1977	29.0	8.5	39.0	13.4		38	39	1
1,2,4	16	State Bilingual LES/FES	pre=18 post=22	pre=CAT,11 (C), 1977 post=CAT,12 (C), 1977	26.3	5.9	38.3	14.2		33	38	5
4,7	16	Title VII 77-78	54	post=CAT,11 (C), 1977			29.0	8.5			38	
2,4	16	State Bilingual 77-78	18	CAT,11 (C), 1977			26.3	5.9			33	
20	17											
9a	18	Title VII										
	19	Title VII FES	21	CTBS,C(S), 1974	29.3	14.3	58.9	10.6	29.6	38	50	12
	19	Title VII LES	3	CTBS,C(S), 1974	19.7	1.9	44.3	8.7	24.6	20	41	21

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2nd Grade, Spanish/French Reading

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest	Posttest	Gain
					Mean	S.D.	Mean	S.D.		Mean	Mean	
20	1											
20	2											
				CTBS, C (Esp.)								
5	3	All Title VII	17	1977	29.6	7.6	37.2	10.9	7.6	39	37	- 2
				Inter-American:								
3	4	All Title VII	28	PL, 1966	30.1	11.0	46.4	15.6	16.3			
				CTBS, C (Esp.)								
1,3,5	5	All Title VII	pre=141 post=142	1977	19.6	9.1	28.9	13.6	9.3	20	31	11
				Inter-American:								
	6	All Title VII	54	PL, 1966	44.6	12.7	36.8	11.7	- 7.8			
20	7											
20	8											
				CTBS, C (Esp.)								
5	9	Title VII NES	14	1977	25.0	11.3	44.0	13.2	19	31	42	11
				CTBS, C (Esp.)								
5	9	Title VII LES	37	1977	21.0	10.2	32.0	14.9	11	24	34	10
				French								
12	10	All Title VII	?	Ach. Test	8.4	4.3	14.7	6.2	7.3			
9a	11	Title VII										
				French								
	12	All Title VII	?	Ach. Test	3.7	1.9	6.3	3.2	2.6			
9a	13	Title VII										
				CTBS, C (Esp.)								
	14	Title VII NES/LES	25	1977	24.4		43.1		18.7	43	60	17

2nd Grade, Spanish/French Reading (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Gain
					Mean	S.D.	Mean	S.D.				
20	15											
	16	Title VII LES/NES	53	CTBS, C (Esp.) 1977	31.9	11.7	40.8	12.9	8.9	42	45	3
16	17	Title VII Non- Title VII	129	Spanish Reading Test	33.3	8.3	44.5	9.3	10.2			
16	17	Controls	115	Spanish Reading Test	27.7	10.6	38.3	12.0	10.6			
20	18											
	19	Title VII FES	5	CTBS, C (Esp.) 1977	27.0	2.8	61.8	5.1	34.8	34	56	22
	19	Title VII LES	2	CTBS, C (Esp.) 1977	23.5	2.5	54.5	3.5	31	35	52	17
	19	Title VII NES	2	CTBS, C (Esp.) 1977	29.5	5.5	47.0	19.0	17.5	39	48	9

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2nd Grade, Math in English

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest		Posttest
					Mean	S.D.	Mean	S.D.		Mean	Mean	Gain
20	1											
9a	2											
5,21	3	All Title VII	17	CTBS,C(S), 1974	20.5	6.3	31.0	4.6	10.5	36	42	6
				InterAmerican Test of General Ability, 1962								
3,21	4	All Title VII	21	CTBS,C(S), 1974	50.1	12.0	62.0	8.3	11.9			
1,3,5	5	All Title VII	pre=144 post=140	CTBS,C(S), 1974	16.6	7.5	30.6	12.0	14	26	41	15
4	6	All Title VII	54	CAT,1,1970			59.5	14.8			34	
7,8,11	7	Non-Title VII Controls	178	SRA,B(1), 1978			204	40			52	
7,11	7	All Title VII	161	SRA,B(1), 1978			202	46	p=ns		54	
5,17	8	Title VII Francos	61	MAT,Primary II, 1971	48.8	4.8 to 12.2	57.0	5.6 to 10.0	8.2	62	50	-12
5,17	8	Title VII Anglos	31	MAT,Primary II, 1971	48.1	5.1 to 10.2	55.9	5.6 to 17.3	7.8	58	48	10
5	9	Title VII NES	18	CTBS,C(S), 1974			32.8	11.7			44	
5	9	Title VII LES	37	CTBS,C(S), 1974	16.0	5.8	27.0	10.1	11	25	36	11
5	9	Title VII FES	22	CTBS,C(S), 1974	17.0	6.9	32.0	8.5	15	27	44	17
22	10	Title VII										
22	10	Non-Title VII										

2nd Grade, Math in English (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				NCEs			
					Pretest		Posttest		Gain	Pretest		Posttest
					Mean	S.D.	Mean	S.D.		Mean	Mean	Gain
5	11	All Title VII	52	CTBS,C(S), 1974	20.2	6.7	36.8	9.0	16.6	35.1	51.6	16
5	11	English Dominant Anglos (Subgroup)	10	CTBS,C(S), 1974	23.3	8.1	39.2	10.1	15.9	41.3	55.3	14
4,11	12	All Title VII	80	SRA,B(1), 1978	138.8	26.2	180.9	33.1	42.1	42	43	1
9a	13	Title VII										
9a	13	Non-Title VII										
8,13	14	Title VII NES/LES	25	CTBS,C (S&Esp.), 1974 & 1977	24.5		40.5			44	57	13
15,19	14	Non-Title VII Controls	36	CTBS,C (S&Esp.), 1974 & 1977	29.9		44.2			53	64	11
20	15											
1,2,4	16	Title VII LES/NES	pre=53 post=55	pre=CAT,11 (C), 1977 post=CAT,12 (C), 1977	33.2	8.1	40.3	10.4		38	40	2
1,2,4	16	State Bilingual LES/FES	pre=17 post=33	pre=CAT,11 (C), 1977 post=CAT,12 (C), 1977	29.9	8.1	38.3	10.8		34	38	4
20	17											
9a	18	Title VII										
	19	Title VII FES	23	CTBS,C(S), 1974	24.0	6.7	48.5	3.8	24.5	43	47	4
	19	Title VII LES	3	CTBS,C(S), 1974	15.7	1.2	42.0	4.3	26.3	25	60	35

2nd Grade, Spanish/French Math

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Gain
					Mean	S.D.	Mean	S.D.				
20	1											
20	2											
20	3											
3	4	All Title VII	25	Inter-American: PHG, 1962	45.6	7.6	57.2	8.0	11.6			
1,3,5	5	All Title VII	pre=93 post=142	CTBS, C (Esp.) 1977	16.9		28.3	13.7	11.4	30	35	5
	6	All Title VII	54	Inter-American: PHG, 1962	61.3	6.7						
20	7											
20	8											
	9	Title VII NES	14	CTBS, C (Esp.) 1977	20.0	9.2	36.0	9.6	16.0	37	48	11
	9	Title VII LES	45	CTBS, C (Esp.) 1977	17.0	6.8	27.0	10.5	10.0	30	32	2
1,2,12	10	All Title VII	?	French Ach. Test	17.4	5.9	22.6	7.6	5.2			
9a	11											
	12	All Title VII	?	French Ach. Test	10.2	6.4	24.7	11.3	14.5			
9a	13											
13, See Eng. Math	14											

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2nd Grade, Spanish/French Math (Continued)

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Gain
					Mean	S.D.	Mean	S.D.				
		All										
20	15	Title VII										
		Non-		MAT, Pri-								
24	15	Title VII		mary 1,								
		Controls	14	1978			53.8	9.9			39	
				CTBS,C								
5	16	Title VII		(Esp.)								
		NES/LES	53	1977	30.9	10.7	41.6	10.1	10.7	52	58	6
		All		Mathematics								
	17	Title VII	112	Skills Test	18.9	4.2	23.8	4.5	4.9			
		Non-		Mathematics								
		Title VII		Skills Test								
	17	Controls	114		16.3	4.5	21.9	5.7	5.6			
20	18											
				CTBS,C								
		Title VII		(Esp.)								
	19	FES	5	1977	22.6	8.0	49.2	1.9	26.6	34	49	15
				CTBS, C								
		Title VII		(Esp.)								
	19	LES	2	1977	20.5	5.5	40.5	5.5	20.0	32	45	13
				CTBS, C								
		Title VII		(Esp.)								
	19	NES	2	1977	15.5	6.5	46.5	4.5	31.0	28	48	20

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2nd Grade, English Oral Language

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Gain
					Mean	S.D.	Mean	S.D.				
20	1											
20	2											
20	3											
10,21	4	All Title VII	14	English LAS, 1, 1977	3.4	1.4	4.1	1.2	.7			
10,21	5	All Title VII	pre=118 post=141	English PAL (OLDM), 1975	1.8	1.1	3.3	1.1	1.5			
21	6	All Title VII	54	English LAS, 1, 1977	82.8	13.3	88.9	9.8	6.1			
20	7											
20	8											
9a	9	Title VII										
20	10											
9a	11	Title VII										
20	12											
9a	13	Title VII										
21	14	All Title VII	30	English LAS, 1, 1977	72.1		80.0		7.9			
	15	Title VII Controls	34	English LAB, 1, 1976	25.0	5.5						
6,21	16	Title VII LES/NES	pre=60 post=18	English LAS, 1, 1977	70.2	11.3	88.2	9.7	18.0			
		State Bilingual	pre=24	English LAS					p=ns			
2,6,21	16	LES/FES	post=14	1, 1977	73.8	2.1	89.8	10.3	16			
20	17											
20	18											
9a	19											

2nd Grade, Spanish/French Oral Language

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest	Posttest	Gain
					Mean	S.D.	Mean	S.D.				
20	1											
20	2											
20	3											
10,21	4	All Title VII	13	Spanish LAS 1977	2.4	1.6	2.2	1.3	-.2			
10,21	5	All Title VII	pre=118 post=141	Spanish PAL (OLDM), 1975	3.7	1.2	4.6	.8	.8			
21	6	All Title VII	54	Spanish LAS, 1, 1977	71.0	16.2						
20	7											
5,21	8	Title VII Francos	64	French Lang. Acqu. Test, Level III	21.7		29.1		8			
5,21	8	Title VII Anglos	35	French Lang. Acqu. Test, Level III	20.2		26.9		7			
9a	9	Title VII										
20	10											
9a	11	Title VII										
20	12											
9a	13	Title VII										
21	14	Title VII FES	32	Spanish LAS 1, 1977			18.2					
21	14	Title VII NES/LES	29	Spanish LAS 1, 1977			69.4					
20	15											
9a	16	Title VII										
20	17											
20	18											
9a	19											

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2nd Grade, Affective Testing

Footnotes	Site Code	Program or Language Group	N	Test, Level, Form, Edition	Raw Scores				Gain	NCEs		
					Pretest		Posttest			Pretest Mean	Posttest Mean	Gain
					Mean	S.D.	Mean	S.D.				
20	1											
20	2											
20	3											
21	4	All Title VII	pre=14 post=10	PSCI, 1974	13.4	2.3	13.9	2.0	.5			
1,12,21	5	Current Title VII	pre=126 post=133	PSCI, 1974	13.0		12.9		-.1			
1,12,21	5	Same Group Grade 1	102	PSCI, 1974	11.9							
12,21	6	All Title VII	54	PSCI, 1974	15.1	2.0	14.5	2.3	-.6			
20	7											
20	8											
9a	9	Title VII										
20	10											
20	11											
20	12											
20	13											
20	14											
9a	15	Title VII										
1,12,21	16	Title VII LES/NES	pre=53 mid=46 post=54	ARS	pre X = 53.9	mid X = 64.4 s.d. = 11.9	post X = 64.7 s.d. = 16.5		pre - post = 10.8			
1,12,21	16	State Bilingual Program LES/FES	pre=28 mid=45 post=57	ARS	pre X = 63.9	mid X = 64.6 s.d. = 13.0	post X = 66.3 s.d. = 16.1		pre - post = 2.4			
20	17											
20	18											
20	19											

APPENDIX E

DIFFUSION SYSTEM MODEL

Introduction

This appendix comprises the detailed model, in outline format, of the intended bilingual-PIP diffusion system. Because the system was an experimental one, planning at the level of detail included here was not explicitly carried out. Many of the statements represent implicit procedures or conditions as deduced by the RMC staff.

Whether the implicit assumptions of the system planners (USOE) are accurately reflected or not is relatively unimportant. In terms of the analyses done in this study, inaccuracies would, at worst, introduce straw men into the results and conclusions. That is, we may have recommended some steps that were actually carried out, or we may have recommended against procedures that were never contemplated by USOE. Aside from some possible problems of these kinds, we believe that the model served the analysis function that we intended.

As a planning tool, minor inaccuracies in this model are irrelevant, since the first step in using the model for planning a new system would be a complete revision of the model. The purpose of the model in this case would be to focus attention upon the many system components and procedures that must be taken into account and to illustrate the interactions among these components and processes.

The principles underlying the organization of the model are described in Section 5 of Volume II. Figures 6 and 7 from Volume II are included here to summarize the overall organization and the descriptive conventions used in the model.

System ComponentsInitial Conditions
and OutcomesProcesses Acting Upon
Components to Produce
Outcomes

Who?	With what characteristics?	Does what?
To Whom?	What characteristics result?	
<u>Personnel</u> USOE OBE OPBE SEA Diffusers Target LEA Decision Makers Project Director Project Staff Others	Goals/attitudes Skills/knowledge Roles/image Availability	Select Train/Inform Elicit Allocate
<u>Other Resources</u> Materials/Equipment Facilities Funds	Content Appearance Roles/image Availability	Select Develop/modify Allocate
<u>Plans and Constraints</u>	Content Roles/image Availability	Select Develop/modify
<u>Students</u>	Goals/additudes Skills/knowledge Aptitude Roles/image Availability	Select Train/Inform Elicit Allocate

Figure 6. Descriptive conventions for diffusion-system models.

GROUPS	INITIAL CONDI- TIONS	STAGES											
		PREPARATION			SELECTION/ ADOPTION			START-UP			OPERATION		
		Processes		Out- comes	Processes		Out- comes	Processes		Out- comes	Processes		Out- comes
		Action	Time		Action	Time		Action	Time		Action	Time	
USOE													
Diffusers													
Target LEAs													

Figure 7. Framework for the "intended" PIP-diffusion system model.

DIFFUSION SYSTEM MODEL

I. USOE

A. Personnel

1. Initial Conditions

- goals/attitudes

- goals include:

- replicating of effective projects in sites which need them
 - determining whether packaging is an effective method of spreading promising practices
 - finding ways of improving achievement of bilingual students
 - continued role in federal dissemination

- attitudes include:

- positive attitudes toward bilingual education
 - willingness to objectively consider relevant data and act on it, within political constraints

- skills/knowledge

- skills include:

- ability to set priorities among goals and to formulate workable plans for bilingual project diffusion
 - ability to effectively formulate RFPs, select contractors and monitor contracts for bilingual diffusion
 - ability to mobilize OE and congressional support for goals
 - ability to work with various personnel and agencies in carrying out plans

- knowledge base includes:

- general awareness of the state of the art in bilingual education, packaging, diffusion and evaluation
 - general awareness of LEA needs and resources in the area of bilingual education
 - general awareness of laws, policies and other constraints affecting diffusion of bilingual projects

- roles/image

- roles/responsibilities flexible enough to adapt to needs of diffusion plan

- personnel responsible for diffusion have positions suitable for initiating plans
- OE viewed by potential adopters as legitimate broker/sponsor of exemplary bilingual projects
- personnel and agencies within OE have clearly defined and non-conflicting areas of responsibility
- personnel in key positions have working relationships within OE that will help support their efforts
- availability
 - relevant OE personnel have time to commit to bilingual diffusion effort

2. Preparation for Diffusion

Processes

- select
 - relevant OE personnel assign/assume responsibility for packaging/diffusion effort
- train/inform
 - relevant OE personnel inform key groups in Congress and within OE about diffusion plans
 - relevant OE personnel train themselves on specific packaging and diffusion issues by reviewing available literature and soliciting inputs from diffusion agents, LEAs, and technical consultants
 - types of projects to be diffused (messages)
 - LEA needs and characteristics (markets)
 - potential of existing networks (channels)
 - types of packaging (products)
 - relevant OE personnel consider complementarity between message, market, channel, and product
 - relevant OE personnel learn specifics about laws, policies and procedures that are likely to impinge on diffusion effort
- elicit
 - OE motivated by:
 - availability of JDRP-approved bilingual projects
 - LEA need for bilingual projects
 - congressional pressure to diffuse exemplary projects, to develop bilingual education programs, to use cognitive achievement gains as evidence of effectiveness of funds provided LEAs

- promising preliminary results from the field test of packaged compensatory education projects

—OE constrained by:

- bilingual education regulations
- bureaucratic procedures/guidelines
- pressure to utilize existing diffusion network(s)

- allocate

- relevant OE personnel coordinate diffusion plans/activities among relevant participants

Outcomes

- goals/attitudes

- placement of bilingual projects in sites where needs and resources are compatible
- replication by adopters of key features of selected project
- ultimately, the attainment in adopter sites of achievement gains similar to those in originating sites
- compatibility of bilingual diffusion plans with other efforts

- skills/knowledge

- relevant OE personnel know about packaging and diffusion (messages, markets, channels and products) and about their complementarity
- relevant OE personnel know about laws, policies and bureaucratic procedures that are likely to constrain diffusion effort
- relevant OE personnel know that local sites seem able to replicate at least some types of projects when they receive funds to do so.
- relevant OE personnel know that there is a need for bilingual projects

- roles/image

- relevant OE personnel have appropriate roles
- OE personnel carry out responsibilities for preparation for diffusion (in relation to personnel, other resources and constraints)

- availability

- relevant OE personnel have sufficient time committed to effectively arrange for diffusion of projects

3. Selection/Adoption

Processes

- select
 - relevant OE personnel replace/expand staff as needed
- train/inform
 - relevant OE personnel and field test evaluation consultants monitor diffusion agents and adopter sites
- elicit
 - relevant OE personnel inform congress of program progress and plans
 - relevant OE personnel communicate within and between OE agencies
- allocate
 - relevant OE personnel coordinate diffusion activities within/between agencies (e.g., Office of Bilingual Education, Office of Evaluation and Dissemination)

Outcomes

- goals/attitudes
 - key congressional people have favorable attitudes toward OE's bilingual education diffusion efforts
 - personnel in relevant OE agencies have favorable attitudes toward bilingual education diffusion program
 - relevant OE personnel have attitudes toward diffusion mechanism that reflects recent experience/knowledge
- skills/knowledge
 - relevant OE personnel and field test evaluation consultants have some knowledge of the nature of selection/adoption activities and the degree to which they met OE's goals
- roles/image
 - relevant OE personnel continue to have appropriate roles
- availability
 - relevant OE personnel continue to have time to commit to bilingual diffusion effort

4. Start-Up

Processes

- select
 - relevant OE personnel replace/expand staff as needed
- train/inform
 - relevant OE personnel and field test evaluation consultants monitor diffusion agents and adopter sites
- elicit
 - relevant OE personnel inform congress of program progress and plans
 - relevant OE personnel communicate within and between OE agencies
- allocate
 - relevant OE personnel coordinate diffusion activities among relevant participants

Outcomes

- goals/attitudes
 - key congressional people have favorable attitudes toward OE's bilingual education diffusion efforts
 - personnel in relevant OE agencies have favorable attitudes toward bilingual education diffusion program
 - relevant OE personnel have attitudes toward diffusion mechanism that reflect recent experience/knowledge
- skills/knowledge
 - relevant OE personnel and field test evaluation consultants have some knowledge of the nature of selection/adoption activities and the degree to which they met OE's goals
- roles/image
 - relevant OE personnel continue to have appropriate roles
- availability
 - relevant OE personnel continue to have time to commit to bilingual diffusion effort

5. Operation

Processes

- select
 - relevant OE personnel replace/expand staff as needed
- train/inform
 - relevant OE personnel and field test evaluation consultants monitor diffusion agents and adopter sites
- elicit
 - relevant OE personnel inform congress of program progress and plans
 - relevant OE personnel communicate within and between OE agencies
- allocate
 - relevant OE personnel coordinate diffusion activities within/between agencies

Outcomes

- goals/attitudes
 - key congressional people have favorable attitudes toward OE's bilingual education diffusion efforts
 - relevant OE personnel have favorable attitudes toward bilingual education diffusion
 - relevant OE personnel have attitudes toward diffusion mechanism that reflect recent experience/knowledge
- skills/knowledge
 - relevant OE personnel and field test evaluation consultant have some knowledge of the nature of selection/adoption activities and the degree to which they met OE's goals
- roles/image
 - relevant OE personnel continue to have appropriate roles
- availability
 - relevant OE personnel continue to have time to commit to bilingual diffusion effort

B. Other Resources

1. Initial Conditions

a. Materials/Equipment

- content/appearance/availability
 - information on diffusion of projects is available (e.g., diffusion literature)
 - information on projects to be diffused is available (e.g., evaluations, proposals)
- roles/image
 - information on diffusion and projects is seen as credible by OE personnel

b. Facilities

- office space for relevant OE personnel is available, adequate, and situated favorably for carrying out duties

c. Funds

- availability
 - funding available or obtainable is in amount sufficient to support diffusion strategy selected
 - relevant OE personnel and congress approve of the use of funds to diffuse bilingual education projects

2. Preparation for Diffusion

a. Materials

Processes

- select
 - OE personnel select relevant materials for review (e.g., on diffusion and projects)
- develop/modify
 - OE prepares any policy statements, position papers, etc., necessary to communicate within OE and with Congress
- allocate
 - OE personnel distribute policy statements, reports, etc., within and between agencies

Outcomes

- position papers, policy statements, reports, etc., are available, adequate, and acceptable to relevant OE personnel

b. Facilities

Processes

- relevant OE personnel develop, modify, and allocate their facilities as required by diffusion activities

Outcomes

- office space continues to be available, adequate, and well located

c. Funds

Processes

- relevant OE personnel obtain and allocate funds for their efforts in carrying out diffusion plans

Outcomes

- adequacy
--sufficient funds are available to support OE personnel carrying out diffusion plans (i.e., over a reasonable time period and at a level that allows the necessary tasks to be carried out)

3. Selection/Adoption

a. Materials/Equipment

Processes

- OE personnel select, develop, modify, and allocate (distribute) necessary materials for their agencies (e.g., copies of diffusion materials for monitoring purposes)

Outcomes

- Needed materials and equipment (e.g., tape recorders, slide projectors) are in the hands of relevant OE personnel in each agency

b. Facilities

Processes

- relevant OE personnel select, develop, modify, and allocate their facilities as required by their diffusion activities

Outcomes

- adequate office space for OE personnel continues to be available

c. Funds

Processes

- relevant OE officials allocate funds as needed for monitoring, providing technical assistance or other leadership in diffusion activities

Outcomes

- sufficient funds are available to support OE personnel in diffusion activities

4. Start-Up

- Same as Selection/Adoption

5. Operation

- Same as Selection/Adoption

C. Plans and Constraints

1. Initial Conditions

a. Plans

- OE personnel have a range of plans for project diffusion and other activities

b. Constraints

- OE personnel operate within congressional mandates, budgets, and other limits, including:
 - the nature of the projects to be identified for diffusion
 - the nature of existing diffusion network(s)
 - federal and state regulations
 - bureaucratic procedures/guidelines
 - state of the art of research and evaluation (e.g., identifying factors leading to success of projects)
 - the national infrastructure (readiness for change in schools, technical expertise regionally, etc.)

2. Preparation for Diffusion

a. Plans

Processes

- relevant OE personnel select, develop, and modify diffusion plans for all subsequent stages and components; state them in RFP's, policy statements, etc.

Outcomes

- diffusion plans are adequate, available, and acceptable within OE and reflect the wishes of Congress

b. Constraints

Processes

- select/develop/modify
 - within bureaucratic/political constraints, relevant OE personnel refer to and formulate policies and guidelines consonant with diffusion plans
 - to the extent possible, relevant OE personnel modify existing policies that conflict with diffusion plans

3. Selection/Adoption

- Same as Preparation for Diffusion

4. Start-Up

- Same as Preparation for Diffusion

5. Operation

- Same as Preparation for Diffusion

II. DIFFUSERS

A. Personnel

1. Initial Conditions

- goals/attitudes
 - provide assistance to LEAs to improve their educational programs
 - maintain an assistance role toward LEAs
 - positive attitudes toward bilingual education
 - not opposed to a federal role in educational dissemination
- skills/knowledge
 - facilitator skills
 - human relations
 - contacting key people
 - following through with plans/actions
 - knowledge of how LEA and school operates
 - knowledge of local people and structures
 - knowledge of content and teaching methodology in relevant grades
 - knowledge of SEA operation
 - basic knowledge of OE operations
- roles/image
 - have working relationships with other diffusers, LEAs and SEAs
 - the kind of person that LEAs would see as credible
- availability
 - pool of potential diffusers available to carry out bilingual project diffusion plans

2. Preparation for Diffusion

Processes

- select
 - OE identifies potential diffusers both within and outside of existing networks and considers their qualifications and availability in relation to diffusion plans and credibility with LEAs
 - OE selects diffusers or groups of diffusers via contracts or other incentives
- train/inform
 - OE continually informs diffusers of plans and constraints
 - diffusers communicate with one another and sites about successful diffusion strategies

- OE and contractor(s) train diffusers
 - diffusion goals and plans
 - project analysis
 - use of diffusion materials
 - expected performance of diffusers in terms of numbers and nature of adoptions to achieve
 - specific types of LEAs to target
 - matching needs/resources of sites to available projects
- OE (and technical consultants) use effective methods in training diffusers
 - sufficient time to cover content in depth
 - training strategies appropriate to goals
- OE communicates role of bilingual project diffusers to other relevant personnel at state, regional, and local levels
- diffusers study materials on local school districts
- diffusers study diffusion materials
- diffusers participate in training provided by OE (and technical consultants)
- diffusers contact relevant personnel at state, regional, and local level
 - inform them of plans/activities
 - seek information on related plans/activities
 - seek advice on selecting/approaching LEAs
- elicit
 - OE elicits agreement from diffusers to proceed on the basis of OE objectives
 - diffusers elicit motivation from the relevant personnel at state, regional, and local levels by offering cooperation, respecting their territory
- allocate
 - OE assigns service areas to diffusers
 - diffusers allocate tasks among their own staff to carry out diffusion activities

Outcomes

- goals/attitudes
 - goals of diffusers are not in opposition to those of OE
 - number of adoptions
 - nature of adoptions (site match, replication)
 - types of LEAs to be contacted

- diffusers are willing to act within plans/constraints communicated by OE
- diffusers are motivated to participate in the diffusion of bilingual education projects via packages
- relevant others at state, regional and local levels are supportive of effort to diffuse bilingual education projects via packages
- skills/knowledge
 - diffusers are knowledgeable about
 - diffusion materials
 - overall diffusion plans and constraints
 - types of LEAs to contact
 - their roles and responsibilities
 - effective diffusion/change agent strategies
 - diffusers are skilled at
 - analyzing projects
 - matching project requirements with district resources
 - relevant personnel at regional, state, and local levels are knowledgeable about bilingual PIP project diffusion effort
- roles/image
 - diffusers and their staffs have appropriate roles and time commitments to carry out diffusion plans
 - diffusers are viewed as appropriate and legitimate technical assistants
- availability
 - diffusers with appropriate skills, attitudes, knowledge, roles, and image are available to carry out OE diffusion plans

3. Selection/Adoption

Processes

- select
 - within political, bureaucratic, and legal constraints; OE replaces diffusers who do not perform within acceptable limits; or maintains appropriate size network
 - diffusers replace/expand their own staff as needed
- train/inform
 - OE continually informs diffusers of plans, progress
 - diffusers share techniques, successes, and failures with other diffusers
 - diffusers continually inform relevant regional state and local personnel of their activities

- elicit
 - OE presents incentives for diffusers to meet goals at this stage
- allocate
 - diffusers coordinate activities among their own staffs
 - diffusers involve relevant regional, state, and local personnel as needed

Outcomes

- goals/attitudes
 - diffusers have high morale
- skills/knowledge
 - diffusers are knowledgeable about OE plans
 - diffusers know about techniques, activities of other diffusers
 - other relevant personnel know about diffuser activities
- roles/image
 - diffusers continue to have appropriate roles
- availability
 - diffusers who perform within acceptable limits continue to be available

4. Start-Up

Processes

- select
 - within political, bureaucratic, and legal constraints; OE replaces diffusers who do not perform within acceptable limits; or maintains appropriate size network
 - diffusers replace/expand their own staff as needed
- train/inform
 - OE continually informs diffusers of plans and progress
 - diffusers share techniques, successes, and failures with other diffusers
 - diffusers continually inform relevant regional state and local personnel of their activities
- elicit
 - OE presents incentives to meet goals at this stage
- allocate
 - diffusers coordinate activities among their own staffs
 - diffusers involve relevant regional, state, and local personnel as needed

Outcomes

- goals/attitudes
 - diffusers have high morale
- skills/knowledge
 - diffusers are knowledgeable about OE plans
 - diffusers know about techniques, activities of other diffusers
 - other relevant personnel know about diffuser activities
- roles/image
 - diffusers continue to have appropriate roles
- availability
 - diffusers who perform within acceptable limits continue to be available

5. Operation

Processes

- Same as Start-Up

B. Other Resources

1. Initial Conditions

a. Materials/Equipment

- literature relevant to diffusion/change agent strategies is available
- reports and other materials that provide information about local school districts are available

b. Facilities

- adequate office space is available or obtainable

c. Funds

- funding is obtainable for diffusers (or available for existing diffusion networks)

2. Preparation for Diffusion

a. Materials/Equipment

Processes:

- select/develop/modify
 - diffusers coordinate with one another with OE and with contractors to select, develop, or modify any materials needed to support diffusion efforts (for communication network, reporting, etc.)
- allocate
 - OE allocates and distributes materials (including PIPs) to diffusers
 - diffusers distribute materials to relevant diffusion personnel at regional, state, and local levels as needed
 - diffusers distribute diffusion materials among their own staff members as needed

Outcomes

- supplementary materials (e.g., charts, pamphlets, forms) are available in adequate quantities and are acceptable to diffusers and their staffs
- relevant personnel at regional, state, and local levels have adequate supply of diffusion materials
- diffusers and their staffs have adequate supply of diffusion materials (including PIPs) to carry out OE plans

b. Facilities

Processes

- diffusers acquire appropriate new facilities or modify existing facilities, as needed

Outcomes

- adequate office space is available
 - space is adequate to house staff
 - space is adequate to house supply of diffusion materials needed

c. Funds

Processes

- OE allocates funds to diffusers. The amount of funds is determined in part on the basis of
 - overall diffusion plan
 - local cost of living factors
 - need to motivate diffusers
- diffusers provide funds to personnel at regional, state, local levels as needed for assistance in diffusion activities
- diffusers allocate funds according to OE's and their own diffusion plans

Outcomes

- diffusers have sufficient funds to carry out diffusion plans

3. Selection/Adoption

- Same as Preparation for Diffusion

4. Start-Up

- Same as Preparation for Diffusion

5. Operation

- Same as Preparation for Diffusion

C. Plans and Constraints

1. Initial Conditions

a. Plans

- USOE, SEAs, and LEAs have plans regarding needs for diffusion effort (these range from well developed networks with clear plans to local needs assessments implicitly pointing to adoption needs)

b. Constraints

- federal/state/local laws, regulations, guidelines, policies that have impact on diffusion activities

2. Preparation for Diffusion

a. Plans

Processes

- OE personnel arrange for diffusion of exemplary bilingual education projects via packages (e.g., issue RFPs, arrange for monitoring)
- contractors submit proposals to act as diffusers of bilingual education projects (via packages)
- diffusers develop plans for conducting awareness activities and subsequent work with LEAs to select, start up and operate bilingual education projects
- diffusers plan for a continuing role as needed to support effective project diffusion

Outcomes

- tentative plans for carrying out diffusion activities

b. Constraints

Processes

- diffusers formulate staff policies, procedures that are consonant with diffusion plans
- to the extent possible, diffusers and OE personnel work to modify any existing external policies/guidelines that conflict with diffusion plans

Outcomes

- internal and external policies/guidelines support diffusion activities

3. Selection/Adoption

a. Plans and Constraints

Processes

- diffusers reformulate plans, strategies, and policies as needed.

Outcomes

- diffusion plans, policies reflect current realities

4. Start Up

- Same as Selection/Adoption

5. Operation

- Same as Selection/Adoption

III. LEAs

A. Personnel

1. Initial Conditions

a. Decision Makers (School Board, superintendent and assistants)

- goals/attitudes
 - favorable political climate toward bilingual education (based on earlier good experience vs. result of pressure groups)
 - priorities in district include bilingual education
 - goals are flexible enough to admit a new project
- skills/knowledge
 - bilingual education knowledge (practical, based on experience)
 - expertise in administration
 - knowledge of funding sources and funding agency procedures
 - political savvy
 - practical knowledge of schools (through visits, teacher contacts, etc.)
 - bilingual, bicultural (some administrators)
 - knowledge of community sentiments
- roles/image
 - power locus in district identifiable
 - hierarchy in district definite
 - ethnic and linguistic background matches community
- availability
 - ready for contacts (with other administrators and community)
 - able to attend meetings

b. Potential Project Directors

- goals/attitudes
 - favorable toward, committed to bilingual education
 - professional aspirations appropriate (e.g., desire for administrative position)
 - accepts cultural differences
 - priorities suitable for directing bilingual project
- skills/knowledge
 - language ability (bilingual)
 - administrative skills
 - training skills (for bilingual education)

- aware of cultural differences and their implications
- bicultural
- political savvy in district
- knowledge of bilingual education
- roles/image
 - position in district (permanence, status, authority)
- availability
 - time for duties, meetings, contacts
 - suitable candidates for position are available
- c. Potential Project Staff (teachers, aides, coordinators, etc.)
 - goals/attitudes
 - favor bilingual education
 - accept students' home culture
 - respect students' language
 - accept minority students (does not have low expectations)
 - skills/knowledge
 - have knowledge of district
 - teaching ability
 - bilingual/biliterate/bicultural (or experience with culture of students)
 - bilingual education skills (e.g., teaching reading in Spanish)
 - group communication skills
 - bilingual evaluation skills (standardized testing, monitoring performance, diagnosis)
 - roles/image
 - role structure in district allows bilingual aides to be instructors and project teachers to participate in decisions
 - ethnic group membership appropriate
 - effectiveness as teachers accepted
 - staff active in decision making
 - availability
 - sufficient number of candidates available to fill roles
 - resource teachers
 - instructional aides
 - volunteers
 - community liaison/coordinator
 - appropriate ethnic and linguistic representation across staff categories

d. Evaluator

- goals/attitudes
 - committed to sound evaluation
- skills/knowledge
 - knows principles of sound evaluation design, testing procedures and instruments, and bilingual program evaluation issues
 - bilingual/biliterate (to observe classrooms and evaluate tests)
- roles/image
 - credible position within or outside district
- availability
 - on-site or locally available

e. Regular School Personnel (principal, teachers, etc.)

- goals/attitudes
 - favor bilingual education
 - accept students' home culture
 - loyalty among staff, toward principal, toward project and director
 - respect student's language
 - accept minority students (does not have low expectations)
- skills/knowledge
 - have knowledge of district
 - teaching ability (for regular teaching)
 - bilingual/biliterate/bicultural (or experience with other cultures)
 - knowledge of bilingual education
 - bilingual education skills (e.g., teaching reading in Spanish)
 - familiarity with and sensitivity to students' culture and customs
 - group communication skills
 - bilingual evaluation skills (standardized testing, monitoring performance, diagnosis)
- roles/image
 - principal and other personnel have appropriate balance of authority and constraint
 - ethnic balance
 - staff active in decision making
- availability
 - stability (vs. transiency) of staff

- composition of certificated and non-certificated staff appropriate (ethnic and linguistic background)
- transiency

f. Community and Parents

- goals/attitudes
 - attitudes toward cultural and linguistic minorities
 - attitudes toward involvement in school affairs
 - attitudes toward school, bilingual education and the system
 - attitudes toward language use, maintenance of home language and culture
- skills/knowledge
 - prepared to make impact (political sophistication, organizing skills, familiarity with school procedures)
 - education level
 - languages and language varieties in use
- roles/image
 - pressure groups (self-organized vs. school-organized)
 - media presentation of minorities
 - organized (PAC, etc.)
 - ethnic, linguistic composition
 - tensions among groups
 - group members appointed (by whom)
- availability (for participation)
 - working parents (including mothers working with their small children)
 - rural/urban area (distance)

2. Preparation for Diffusion

a. Decision Makers

Processes

- train
 - OE and diffusers make DM's aware of diffusion issues and possibilities
- elicit
 - OE and diffusers develop incentives which will encourage DMs to favor diffusion

Outcomes

- goals/attitudes
 - DMs regard project adoption as a possibility

b. Potential Project Staff

Processes

- train/inform
 - OE arranges for training teachers to be bilingual
 - OE arranges for training bilingual teachers in bilingual education skills
- organize/assign
 - OE arranges for re-locate bilingual people

Outcomes

- skills/knowledge/availability
 - bilingual teachers with adequate bilingual education knowledge are available at sites which need projects

3. Selection/Adoption

a. Decision Makers (Federal Project Officers, Assistant Superintendent, proposal writer, etc.)

Processes

- select
 - diffusers identify relevant DM's
- train/inform
 - Decision Makers (DMs) have contact with diffuser (TRC, SRA; either DM or diffuser can initiate contact)
 - DMs inform non-public school officials that project is available for LES students
 - DMs attend conventions, etc.
 - DMs read Federal Register
 - DMs read printed diffusion pamphlets, etc.
 - DMs inquire (as necessary) about availability of personnel and other resources, laws and policies (local, state and federal) affecting project; determine compliance requirements
 - DMs use feedback of staff and community in planning
- elicit
 - OBE or state officials invite DM to apply for funds
 - diffusers impress DMs with importance of bilingual project, encourage DMs interest in adoption
 - Office of Civil Rights cites district for non-compliance, calls for Lau remedies

- allocate
 - Superintendent assigns responsibility (e.g., for proposal writing) to Federal Projects Officer, potential PD, or other person

Outcomes

- goals/attitudes
 - DMs favorable toward adoption of project
 - DMs committed to providing necessary staff and other resources
 - DMs receptive to community advice
- skills/knowledge
 - DMs informed regarding choice of projects (goals, features, constraints)
 - DMs aware of relevant laws, policies, guidelines affecting project
- roles/image
 - DM's key personnel for adoption work identified and in a position to do work necessary
- availability
 - administrators who are in a position to make project-relevant decisions are available for contacts and work

b. Project Director (candidate or DM in PD role)

Processes

- select
 - DMs identify candidates
 - DMs interview, discuss candidates
 - Board of Education and superintendent approve candidate
- train/inform
 - PD reads project selection materials (ASK, etc.)
 - PD has contacts with TRC, other consultants, diffusers, original site staff
 - PD has contacts with other bilingual projects (including originating site)
 - PD analyzes availability of staff and other resources; informs him/herself about policies and constraints relevant to project selection
- elicit
 - superintendent allots funds for project
 - diffusers and original site staff impress PD with importance of project
 - ASK motivates enthusiasm to adopt project

- allocate
 - DMs assign roles and responsibilities

Outcomes

- goals/attitudes
 - willing to accept role
 - ready to support project
- skills/knowledge
 - aware of project goals, philosophy, features, and structure
 - knows role he/she will play
 - aware of district mechanisms (budgeting procedures, etc.) and hierarchy
 - aware of availability of staff and other resources, and about policies and constraints that could affect project
- roles/image
 - is in a position appropriate for directing project (seen as having status equal to similar level administrators)
- availability
 - adequate candidates are available

c. Potential Project Staff (Teachers, Aides, Instructional Coordinator)

Processes

- select/elicit
 - DMs determine interest in project and assess skills (e.g., Are there enough bilingual teachers with appropriate skills available and willing to join project?)

Outcomes

- goals/attitudes
 - staff candidates identified have appropriate goals/attitudes
- roles/image
 - staff candidates have appropriate roles/image
- skills/knowledge
 - staff candidates identified have appropriate skills
- availability
 - sufficient staff candidates in each category are available to operate project

d. Evaluator

Processes

- select
 - DMs identify evaluator with adequate basic knowledge and specific knowledge of issues affecting bilingual project evaluation (and if necessary, knowledge of training, community relations, etc.)
- train/inform
 - DMs inform evaluator of project goals and features, special needs of bilingual project, and if necessary, arrange for training in bilingual project evaluation issues (prepare to select tests with appropriate regional vocabulary; distinguish language proficiency from dominance; test reading knowledge in both languages)
- elicit
 - funding agencies make clear their criteria for adequate evaluation reports and sanctions for not delivering them
- allocate
 - DMs clearly assign job of designing evaluation to evaluator

Outcomes

- goals/attitudes
 - evaluator wants to prepare a sound evaluation report
- skills/knowledge
 - evaluator knows how to prepare a sound evaluation design for a bilingual project
- roles/image
 - evaluator's role is clear to district officials and staff
- availability
 - evaluator has time to allot to project

e. Regular School Personnel

Processes

- select
 - PD determines relevant staff to inform about the project

- train/inform
 - PD holds orientation meetings or otherwise briefs staff members
- elicit
 - PD impresses staff with importance of project, how it will help staff with duties, etc.

Outcomes

- goals/attitudes
 - staff accepts/supports project installation
- skills/knowledge
 - staff aware of project before it is installed

f. Community and Parents

Processes

- select
 - DMs identify key individuals or groups in the community
- train/inform
 - project advocates explain project philosophy (e.g. purpose of native language literacy, of early learning through dominant language) to community members
 - project advocates inform community members about project options (through public meeting, announcement in paper, on radio)
 - DMs inform community of federal requirements for parent involvement
 - community groups hold meetings, sponsor media announcements, telephone to inform community about need for project
- elicit
 - DMs elicit community opinion about choice of projects
 - community organizations (e.g., La Raza Association) arouse anger of community
- allocate
 - community and parents form themselves or others into pressure groups, task forces, etc.
 - DMs form parent group to approve proposal

Outcomes

- goals/attitudes
 - community is supportive of project
 - community members have goals reflecting local conditions (replace school board member, start adult education program)
- skills/knowledge
 - community is informed about project and its philosophy, goals and methods
 - community has new organizational skills
- roles/image
 - community members see themselves as active in school affairs
 - DMs see community as active in school affairs
- availability
 - community members available to participate in planning and to approve project plans and proposal

4. Start-up

a. Decision Makers

Processes

- select
 - PD determines relevant DMs to contact
- train/inform
 - PD informs DMs about project goals, procedures, philosophy, structure etc., as they relate to DM roles (PD uses board meeting reports, evaluation plans, etc.)
 - DMs and PD inquire about laws and guidelines relevant to project; determine compliance requirements
- elicit
 - PD elicits DM support for project start-up
- allocate
 - DMs allocate time for considering decisions related to project

Outcomes

- goals/attitudes
 - DMs sufficiently action-oriented to promote efficient project start-up (no blocks to purchasing, hiring, budget adjustments)
- skills/knowledge
 - DMs aware of project goals, procedures, etc., insofar as project depends on DM support for start-up
- roles/image
 - shifts of power or authority within district (due to project grant or role assignments) facilitate start-up
- availability
 - DMs available for contact (to grant permission, consult, meet with PD)

b. Project Directors

Processes

- select
 - DMs assign position definitely (or hire) PD
- train/inform
 - PD reads PIP and seeks technical assistance necessary to train him or herself
 - PD informs self about cultural, social and language issues relevant to the project and the community
 - PD reviews curriculum materials
 - PD familiarizes him or herself with district procedures and structure
- elicit
 - DMs, diffusers, OE make job assignment clear and provide incentives for PD to carry out his/her role well
 - PD establishes role by performing key functions (staff selection, budget control)
 - PD reads PIP; PIP encourages desire to replicate
- allocate
 - PD organizes time to study project and start it effectively
 - DMs assign PD role in time for start-up

Outcomes

- goals/attitudes
 - commitment to project is well-formed
- skills/knowledge
 - administrative (management, public relations, etc.) skills sufficient for start-up
 - knowledge of laws, policies and guidelines affecting project is sufficient
 - has knowledge of project and school roles and functions
 - has knowledge of DM functions (who to keep informed, who to contact for permissions)
- roles/image
 - position as PD established in district
- availability
 - sufficient time available for responsibilities

c. Project Staff

Processes

- select
 - DMs and PD establish criteria for staff selection
 - PD identifies local talent and advertises positions
 - PD screens applicants with appropriate panel
 - PD hires or selects staff members for each position (teacher, aide, instructional coordinator, etc.) based on competencies, not tenure
- train/inform
 - PD informs potential staff members about project
 - staff members attend workshop sponsored by the project
 - staff members receive training as necessary in language skills, evaluation, duties, bilingual teaching methods
 - PD assures that teachers are aware of school procedures during recess, in library and cafeteria, etc., and can coordinate with other special projects
- elicit
 - PD elicits agreement to join project (offers suitable salary, career ladder, good working conditions, etc.)

- PD elicits support for project (commitment necessary for effectively playing designated role and having loyalty to project)
- PD encourages participation in decision making

- allocate
 - PD assigns roles

Outcomes

- goals/attitudes
 - committed to project and participation (volunteered)
 - committed to bilingual education
- skills/knowledge
 - sufficient language skills (Spanish/French/English) to fulfill role in project
 - bilingual (speaks and understands English and standard French or Spanish)
 - speaks and understands local varieties of children's home language
 - has some degree of fluency in children's home language (native speaker; uses Spanish/French at home with family and friends)
 - sufficient knowledge of bilingual education methods and materials
 - sufficient knowledge of district and school procedures to perform functions in project (aware of political and social climate and practical procedures; aware of pressure groups, etc.)
 - sufficient knowledge of community and home culture to perform functions in project
 - sufficient knowledge of project and roles to teach effectively (according to PIP guidelines)
- roles/image
 - credible as bilingual staff (previous college and inservice training, credential, certification)
 - staff roles are set appropriately (e.g., who reports to whom; staff-school relations good; teachers participate in decision-making)
 - role is appropriate in relation to regular staff
- availability
 - sufficient number of staff members assigned to each position (bilingual aides, curriculum specialists, etc.)
 - selected in time for training

d. Regular School Personnel

Processes

- select
 - PD identifies key regular school personnel (who are influential or potentially troublesome)
- train/inform
 - PD or project staff informs regular staff about project and its relation to them
- elicit
 - PD seeks to interest regular staff in the project

Outcomes

- goals/attitudes
 - accept and support project
- skills/knowledge
 - sufficient knowledge of project to answer parent questions and to satisfy professional interest
- roles/image
 - relationship established between PD and principal, between project staff and regular school staff
- availability
 - staff is available for orientations, contacts

e. Community and Parents

Processes

- select
 - PD continues to identify key individuals and groups from community
 - community members volunteer (or PD recruits them) to be members of the Community Advisory Committee (CAC) and to be parent aides
- train/inform
 - PD (or principal) informs community members, groups, and parents about project (all LES parents)
- elicit
 - PD elicits support for project (permission to send students, volunteer for PAC, to be an aide)

Outcomes

- goals/attitudes
 - support project and its goals
 - parents choose to have students participate
- skills/knowledge
 - know about federal law requiring parent input
 - aware of project and understand its philosophy, goals and methods
- roles/image
 - parents see themselves as involved/active/powerful
- availability
 - available for contacts or meetings

5. Operation

a. Decision Makers

Processes

- train/inform
 - PD and project staff attend board meetings, submit reports, and inform decision makers informally about project events and progress
 - Evaluator and PD present and explain evaluation results when available
- elicit
 - PD seeks to create, increase and/or maintain positive attitudes sufficiently to guarantee project continuation

Outcomes

- goals/attitudes
 - support project sufficiently to ensure efficient project operation
- skills/knowledge
 - aware of project problems and events that require DM action
- roles/image
 - DM's roles change as necessary during project operation (by delegating or assuming responsibility)
- availability
 - DMs available for contacts as needed

b. Project Director

Processes

- train/inform
 - PD learns more about his/her function by performing it
 - PD attends training sessions, conventions, etc.
- elicit
 - Federal Projects officer elicits compliance with guidelines; effective action etc.
- allocate
 - PDs allocate time sufficient to perform functions

Outcomes

- goals/attitudes
 - continued commitment to project
- skills/knowledge
 - administrative skills sufficient for operation
- roles/image
 - position as PD is established (vs. temporary or token position) and maintained (recognized as leader)
- availability
 - PD allocates time to perform functions

c. Project Staff

Processes

- select
 - PD selects new staff for replacements and expansion
- train/inform
 - PD arranges for inservice training as needed (consultants, conventions, etc.)
- elicit
 - PD seeks support of staff for project
 - PD offers appropriate incentives for good staff to remain (salary, working conditions, etc.)
 - PD and staff maintain good communication with each other
- allocate
 - staff allocates time needed to perform functions (preparation time for teaching, meeting attendance, etc.)
 - staff plans jointly as needed

Outcomes

- goals/attitudes
 - positive attitudes toward all students (LES, NES, FES) and instructors
 - continued commitment to project and bilingual education
 - continued acceptance of students' home culture
 - accepts role of each project staff member
 - attitudes towards children's parents
 - loyalty among staff toward principal, project, and director
- skills/knowledge
 - adequate skill to function effectively in project
 - knowledge of roles of all staff members (project teachers clearly understand roles of support staff)
- roles/image
 - continued credibility as bilingual staff
 - PD, school staff and DM's recognize bilingual project staff roles (scope of duties)
 - bilingual aide's role/function accepted
 - minority instructor serves as role model
- availability
 - time allotment appropriate to duties
 - sufficient number of staff members remain available throughout the school year

d. Regular School Staff

Processes

- train/inform
 - PD or project staff informs regular staff about project and its relation to them
- elicit
 - PD or project staff seeks interest in the project by regular staff (by joint planning, joint projects)

Outcomes

- goals/attitudes
 - accept and support project
- skills/knowledge
 - sufficient knowledge of project to answer parent questions

- availability
 - project staff is available for orientations, contacts, joint planning

e. Community and Parents

Processes

- select
 - PD or project staff identify key individuals or groups in the community
- train/inform
 - PD, project staff, principal, and evaluator inform community members about project (letters, newsletters, meetings, radio, TV, telephone, home visits, festive events, notices, evaluation reports)
- elicit
 - PD or project staff elicits parent support for project

Outcomes

- goals/attitudes
 - support project and its goals (volunteer for Parent Advisory Council, serve as aide, willing to send students)
- skills/knowledge
 - aware of project
- availability
 - sufficient number of parents and community members are available for contacts or meetings

B. Other Resources

1. Initial Conditions

a. Materials/Equipment

- adequate basic curriculum materials in English and non-English language (district or state mandated, etc.) are available
- student records are available as needed

b. Facilities

- Administrative offices
 - equipped as needed (typewriter, supplies)
 - space available to allocate for project (no severe overcrowding, well located)

- school and classrooms (and Parent Involvement Center)
 - rooms meet health and safety standards (sufficient size, quiet, light, ventilation, heat, access)
 - location is adequate (in relation to community residency patterns, bussing, desegregation)
 - design is appropriate (walls present or absent, etc.)
 - sufficient number of classrooms

c. Funds

- district operates with sufficient funds to avoid misappropriation of project funds (or delay of allocation of project funds)
- sufficient funding sources are available to support the project (ESEA Title VII, state bilingual funds, etc.)
- DEs and community approve use of funds for bilingual education

2. Preparation for Diffusion

a. Materials/Equipment

- select
 - OE (or contractor) identifies existing packages available for diffusion of projects (analyzes their usefulness, etc.)
- develop/modify
 - OE and/or technical consultants select projects (identify candidate projects, set criteria for selection, apply criteria including validation by JDRP, make final selection, consider market for projects to adopt)
 - OE and/or technical consultants with developer site staff
 - develop sets of specification for packaged projects (consider delivery system, needs of potential adoptors, and project features)
 - produce packages appropriate for project diffusion

Outcomes

- content/appearance
 - adequate printed and audiovisual materials are available for LEAs to adopt new projects
 - content complete and accurate
 - format useable, appealing

- roles/image
 - packages acceptable to users
 - ethnic and linguistic presentation in displays and audiovisual materials
 - cost not prohibitive
 - packages acceptable to developer site staff (considered a useable and accurate presentation of their project)
- availability
 - sufficient number of copies of packages or components available for each user (teachers, principals, etc.)

3. Adoption/Selection

a. Materials/Equipment

Processes

- select
 - DMs assess curriculum materials in the schools to determine how many materials need to be ordered
 - DMs determine sources of bilingual materials (e.g., site-produced booklets)
- develop/modify
 - DMs prepare proposal for project, following requirements for format and meeting deadline

Outcomes

- adequate bilingual materials are commercially available or can be developed
- proposal is available to funding agency on time (with adequate content and appearance)

b. Facilities

1) Administrative offices

Processes

- select
 - DMs tentatively choose office space for PD, evaluator, instructional consultant, community coordinator (if necessary)
- develop/modify
 - DMs plan changes needed for PD office

- allocate
 - DMs tentatively assign PD (and others) an office

Outcomes

- adequate administrative offices available (comparable to other district offices)
- 2) Adequate schools and classrooms (and Parent Involvement Center) available

Processes

- select
 - DMs identify schools or classrooms for project use (considering staff and parent wishes)
- develop/modify
 - DMs plan construction needed, if any
 - DMs plan modifications needed to meet health and safety regulations
- allocate
 - DMs assign schools or classrooms for project (consulting with principal and staff)

Outcomes

- adequate classrooms (and Parent Involvement Center) available (comparable to other district classrooms and centers; e.g., well located; meet health and safety regulations and design requirements of project)

c. Funds

Processes

- select
 - DMs identify funding sources for bilingual education, write proposals to seek funds
- allocate
 - DMs prepare budgets to accommodate project and as required by funding agency

Outcomes

- funding level is sufficient for project
- budget categories afford efficient operation of project

4. Start-Up

a. Materials/Equipment

Processes

- select
 - PD and staff review and analyze appropriateness of various bilingual materials
 - PD and staff select and order materials and equipment needed (e.g., core and supplementary materials specified in PIP)
 - PD and staff seek information (e.g., from PD and other sites) regarding sources of bilingual materials
 - Evaluator selects and orders tests
- develop/modify
 - PD and staff develop bilingual materials as necessary
- allocate
 - PD distributes materials and equipment to classrooms
 - teachers (and aides) arrange materials and equipment in classroom (e.g., set up learning centers)

Outcomes

- content of bilingual curriculum materials
 - language features of printed materials are appropriate
 - regional variety
 - standard/non-standard language
 - vocabulary
 - difficulty level (vocabulary) of materials is correct for students' ability
 - topics are appropriate for age of students and relevant to their experience (regional content)
 - materials are of high quality (of clear, wide scope, sequentially arranged with skills identified, meet objectives specified for project and district)
- appearance of bilingual curriculum materials
 - illustrations are appropriate
 - packaging adequate (equivalent to English materials)
 - quality of paper
 - format
 - graphics

- roles/image
 - staff, DMs, PD, community and parents judge materials suitable for local students
- availability
 - bilingual materials, commercial or locally developed, are available
 - equipment and supplies are available

b. Facilities

1) Administrative Offices

Processes

- select
 - DMs make final selection of office
- develop/modify
 - DMs carry out changes needed in office
- allocate
 - DMs make final office assignment

Outcomes

- PD has adequate office (well located) available for use at beginning of startup

2) Classrooms (and Parent Involvement Centers)

Processes

- select
 - PD works with principals in assignment of classrooms (and Parent Involvement Center) for project
- develop/modify
 - PD assures that changes needed, e.g. construction and safety modifications are carried out
 - teachers decorate rooms according to PIP guidelines (e.g. bilingual displays)
- allocate
 - principals assign project classrooms
 - teachers (and aides) arrange furniture as needed for project e.g. open classroom arrangements

Outcomes

- project classrooms (and Parent Involvement Center) adequate and available

c. Funds

Processes

- select
 - PD seeks continuation funding sources and complies with funding agency guidelines to assure continued support
- allocate
 - PD spends funds according to budget (modifying as needed)

Outcomes

- sufficient funding is available in all budget categories

5. Operation

a. Materials/Equipment

Processes

- select
 - PD and/or staff review and select new materials and equipment as needed, e.g. for second year, for students needs as identified
- develop/modify
 - staff (e.g. curriculum coordinator) develops and modifies materials as needed
- allocate
 - DMs and PD distribute materials as they arrive
 - staff members arrange materials for efficient use (e.g. sharing among teams; storage and display within classrooms)

Outcomes

- adequate materials (as defined in start-up) remain available and acceptable, or new ones have been secured

b. Facilities Classrooms

Processes

- develop/modify
 - teachers decorate room as specified in PIP (e.g. displays in two languages, bright, colorful, etc.)

Outcomes

- adequate classrooms are in use
 - bilingual/bicultural displays (appropriate themes)
 - displays of student work

c. Funds

Processes

- select
 - PD seeks continuation funding sources and complies with funding agency guidelines to assure continued support
- allocate
 - PD spends funds according to budget (modifying as needed)

Outcomes

- sufficient funding is available in all budget categories

C. Project Plans and Constraints

1. Initial Conditions

a. Project Plans

- suitable projects available (JDRP approvable; relevant to student needs)
- district has long-range plan for languages (transition, maintenance)

b. Constraints (laws, policies, guidelines)

- content
 - explicit and clear federal, State and local laws and guidelines about bilingual education and special projects (funding requirements)
 - implicit policies (local, regional, or national) affecting bilingual education and special projects (e.g., allowing bilingual volunteers) are clear
 - specific conditions of funding agencies clear
 - teachers' union and contract agreements clear
- roles/image (degree of compliance/enforcement)
 - sanctions for enforcing laws and policies are clear

- availability
 - information regarding laws, guidelines, and policies available to schools
 - formal laws, guidelines, policies are available in usable form (non-technical language, limited detail, sufficient brevity, explicit statements)
 - implicit constraints or informal policies are made clear to users

2. Selection/Adoption

a. Project Plans

Processes

- DMs make necessary project plans

Outcomes

- tentative plans are made for project adoption, start-up, operation, and continuation

b. Constraints (laws, policies, guidelines)

Processes

- develop/modify
 - DMs formulate policies suitable for project (e.g., arrange for hiring bilingual teachers even if there is no vacancy)
 - DMs modify local policies as necessary for project
 - DMs make policies and sanctions known to school and community (seek parental views)

Outcomes

- content
 - district has policies favorable to project
 - DMs are aware of laws and guidelines relevant to project
 - project guidelines compatible with district policy (practical, realistic)
- roles/image (degree of compliance/enforcement)
 - schools continue to comply with laws, policies and guidelines
 - laws and guidelines are enforced and constraints made operational

- availability
 - information regarding formal laws, guidelines, and policies available to schools
 - laws, guidelines, policies are available in usable form (non-technical language, limited detail, sufficient brevity, explicit statements)
 - implicit constraints or informal policies are made clear to users

3. Start-Up

a. Project Plans

Processes

- DMs and PD adopt and revise plans for project
 - evaluator plans sound evaluation suitable for bilingual project (assesses language acquisition, culture, reading, math, affective gains, other subjects; gathers data on students' home language, SES, mobility)
 - PD plans training sessions, facilities use, etc.
 - staff and evaluator plan for curriculum continuity (behavioral objectives and tests for each grade level)

Outcomes

- detailed project plans are made for start-up, operation and continuation

b. Constraints

Processes

- develop/modify
 - DMs formulate or modify policies suitable for project
- allocate
 - DMs inquire about laws and guidelines relevant to projects, determine compliance requirements
 - policy makers or legislators disseminate laws and policies

Outcomes

- content
 - district has policies favorable to project
 - PD disseminates laws and guidelines relevant to project

- roles/image (degree of compliance/enforcement)
 - schools continue to comply with laws, policies and guidelines
 - laws and guidelines are enforced by relevant agency
- availability
 - information regarding laws, guidelines, and policies available to schools
 - laws, guidelines, policies are available in usable form (non-technical language, limited detail, sufficient brevity, explicit statements)
 - implicit constraints or informal policies are made clear and usable

4. Operation

a. Project Plans

Processes

- staff and evaluator plan for curriculum continuity (behavioral objectives and tests for each grade level)
- DMs revise plans as needed and formulate plans for continuation

Outcomes

- PD and DMs prepare proposals and plans for continuation

b. Constraints

Processes

- develop/modify
 - DMs formulate policies suitable for project
 - DMs make plans necessary for project
 - DMs modify local policies as necessary for project
 - PD works toward policy changes as it seems feasible and wise
 - DMs make policies and sanctions known

Outcomes

- content
 - district has policies favorable to project
 - DMs are aware of laws and guidelines relevant to project

- roles/image (degree of compliance/enforcement)
 - schools continue to comply with laws, policies and guidelines
 - laws and guidelines are enforced (and enforceable)
 - laws and guidelines are seen as reasonable
- availability
 - information regarding laws, guidelines, and policies available to schools
 - laws, guidelines, policies are available in usable form (non-technical language, limited detail, sufficient brevity, explicit statements)
 - implicit constraints or informal policies are made clear and usable

D. Students

1. Initial Conditions

- goals and attitudes
 - level of achievement motivation (vandalism, absenteeism, drop-out rate, retentions) in reasonable range
 - positive attitudes towards bilingual programs and school
 - positive attitudes towards use of first and second languages
 - good self-concept
- skills/knowledge
 - proficiency in languages spoken at home and school in reasonable range
 - level of general skills suitable for age (may relate to time in U.S. and U.S. schools, previous bilingual program)
 - language dominance
 - ability in academic subjects in reasonable range
- roles/image (as seen by teachers, administrators, community)
 - ethnicity (numbers, %)
 - autonomy, activity (vs. dependence, passivity) in learning situation
- availability
 - attendance levels high
 - appropriate number of students with need for special project (in relation to total school population)
 - migrancy, transiency law

2. Selection/Adoption

Processes

- select
 - DMs identify target students by school and general characteristics (needs) and communicate with parents, principals, and evaluator
 - DMs ensure that a sufficient number of students need project

Outcomes

- tentative target group with appropriate characteristics (LES, NES) is identified

3. Start-Up

Processes

- select
 - evaluator, PD, and staff formulate student entry criteria (and exit criteria, if desired)
 - achievement level (including reading readiness)
 - language dominance and proficiency
 - ethnicity
 - socioeconomic status (SES)
 - volunteers for participation
 - desegregation quotas
 - teacher nomination
 - compatibility with other students or with teacher
 - availability of instructors, materials, and facilities
 - parental wish
 - age
 - attendance pattern
 - language exposure outside school
 - teachers identify specific children (by determining their needs) and wants) to participate in project (secure parental permission, test, get nominations)
 - evaluator assists staff in planning assessment needed
 - parents enroll their children in project
- allocate (organize/assign)
 - PD, staff, and evaluator assign students to groups or classrooms (whole classes, pull-out, groups within classes, segregation or relocation of LES/NES students)
 - PD determines criteria for student placement (same as entry and exit criteria, above, plus skill of teachers and aides)

- PD and evaluator determine procedures and times for placement, re-grouping (if any) and exit (if any)
 - testing
 - teacher evaluation
 - parental wish and permission
 - arbitrary

Outcomes

- appropriate children (goals/attitudes, skills/knowledge, aptitude, image) in sufficient numbers are assigned to each group or classroom.

4. Operation

Processes

- select
 - teachers screen new students for entry into the project
 - teachers determine when students should leave project, using exit criteria (maximum grade level achieved, parental request, state law, skills adequate)
- train/inform
 - content
 - instructors present planned content (teach appropriate subjects, cover topics in syllabus and in lists of performance objectives, English and second language skill development comparable).
 - instructors vary content according to students' needs (regional variation in culture and language, individual differences, specific behavioral objectives)
 - instructors teach language and culture well (cultural material integrated across subjects, children's language taught with culture, realistic (vs. touristic) approach to culture)
 - instructors and evaluator determine content areas students know
 - ..select or develop tests appropriate for bi-lingual students
 - ..administer diagnostic and achievement tests
 - instructors and evaluator keep records of student progress and achievement
 - ..student and class profiles (checklists of skills, contracts, affective growth charts, student record folders)

--method

- instructors use special approaches (if any) well
 - ..computer assisted
 - ..programmed tutoring
- instructors use regular techniques well
 - ..question and answer, discussion
 - ..worksheets, seatwork
 - ..games, songs, field trips, projects
 - ..felt board, pictures, displays
 - ..stories, explanations
 - ..programmed materials
 - ..TV, film, audio-tape
 - ..Language Master, Systems 80
- instructors use bilingual techniques well (follow plan for language use)
 - ..language use in instruction
 - . systematic alternation during lesson (back-to-back, review-review, translation, pattern drill)
 - . requirement to speak or write first or second language in certain subjects
 - . free alternation
 - ..approach to non-standard forms
 - . non-standard forms in home language are accepted or corrected (syntax vs. pronunciation; during formal lesson vs. during free speech)
 - ESL
 - Reading and other language skills in native language
 - . method of correction (correct form taught later, corrected immediately)
- instructors pace instruction well
 - ..students work at own pace
 - ..teachers present new material at appropriate rate (students follow and are not bored)
 - ..rhythm of lesson engages students' interest
 - ..high percentage of time in actual instruction or practice (vs. organizational or disciplinary activities)

- instructors play appropriate roles in teaching
 - ..teacher presents new material; if monolingual, does English instruction
 - ..aide has instructional role, reinforces concepts, or does home language instruction
 - ..parent does cultural component, clerical work, tutoring, reinforcing native language, activities and special events
 - ..instructors follow plan for percent time bilingual students spend with teacher, aide, and other staff (compared with English-speaking students)
 - ..cross-age and peer tutors participate
 - ..community resource person, consultant, specialists, others play role
- elicit/motivate
 - instructors use planned techniques for discipline, noise control, and reward/punishment
 - instructors create appropriate affective climate in general
 - self-concept development
 - teacher's tone of voice, empathy enhance learning
 - teacher provides for success for each student
 - instructors create appropriate affective climate in relation to language and culture
 - instructors show acceptance of home culture
 - instructors encourage/accept responses in home language
 - instructors develop positive attitudes in peers toward new arrivals
 - instructors show cultural awareness and sensitivity (place equal value on both languages and cultures)
 - instructors use second language for teaching and at other times
 - instructors involve parents in a way that motivates students
 - parents help form positive attitudes (good work habits)
- Allocate
 - teachers schedule students' time
 - bilingual students have exposure in physical education, art, and music comparable to other students
 - teachers group and regroup students within their classes (considering student and parental choice, test results, performance, etc.)
 - teachers re-assign students as needed between classrooms

- PD, regular staff and teachers assign students to classrooms for next year
- students have appropriate time with various instructors (bilingual, highly skilled, etc.)

Outcomes

- goals/attitudes
 - students appreciate having their parents involved in school activities
 - students perceive bilingual instructor as role model
 - students are motivated towards using English and their native language at appropriate times during instruction
 - students have good self-concept
 - students appreciate their home culture
 - students want to communicate with and associate with students from other ethnic groups
 - students have positive (or less negative) attitudes toward recent arrivals
 - students like school
- skills/knowledge
 - students meet skill requirements of project (English language, home language, content areas, etc.)
- roles/image
 - students are accepted by their peers and teachers
 - students' abilities are respected
- availability
 - students who need the project continue to be available to participate (proximity to school, sufficient numbers for project classrooms, characteristics conform to policy, e.g., segregation)

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